

Bangladesh, Brazil, Burkina Faso...and 12 more - Technology Sophistication Across Establishments

Xavier Cirera, Diego Comin, Marcio Cruz

Report generated on: February 20, 2026

Visit our data catalog at: <https://microdata.worldbank.org/>

Identification

SURVEY ID NUMBER

WLD_2019-2023_FAT_v01_M

TITLE

Technology Sophistication Across Establishments

ABBREVIATION OR ACRONYM

FAT QJE 2026

COUNTRY/ECONOMY

Name
Bangladesh
Brazil
Burkina Faso
Cambodia
Chile
Croatia
Ethiopia
Georgia
Ghana
India
Kenya
Korea, Rep.
Poland
Senegal
Vietnam

STUDY TYPE

Enterprise Survey [en/oth]

SERIES INFORMATION

The Firm-level Adoption of Technology (FAT) Survey was conducted by the World Bank in 15 countries: Bangladesh; Brazil (Ceará, Paraná, and São Paulo); Burkina Faso; Cambodia; Chile; Croatia; Ethiopia; Georgia; Ghana; India (Uttar Pradesh, Tamil Nadu, Gujarat, and Maharashtra); Kenya; Poland; Senegal; South Korea; and Vietnam. This dataset contains data for all countries. The individual country level datasets are also available for download from the Microdata Library.

ABSTRACT

This dataset includes Firm-level Adoption of Technology (FAT) survey microdata used in the Technology Sophistication Across Establishments paper by Cirera, Comin, and Cruz (Forthcoming). It combines primary establishment-level data collected by the World Bank in 15 countries: Bangladesh; Brazil (Ceará, Paraná, and São Paulo); Burkina Faso; Cambodia; Chile; Croatia; Ethiopia; Georgia; Ghana; India (Uttar Pradesh, Tamil Nadu, Gujarat, and Maharashtra); Kenya; Poland; Senegal; South Korea; and Vietnam. Data implementation was conducted by the World Bank in collaboration with National Statistical Offices (NSOs) and official agencies in various countries. Brazil refers to the states of Ceará, Paraná, and São Paulo. India refers to the states of Tamil Nadu, Uttar Pradesh, Gujarat, and Maharashtra.

The paper studies technology sophistication using a novel approach that measures the sophistication of the most advanced (MAX) and the most widely used (MOST) technologies in each of the key business functions within establishments. Using data from over 21,000 establishments across 15 countries, we find that establishments generally underutilize the most sophisticated technologies available within a business function. These MAX-MOST gaps are persistent and strongly

associated with productivity both across establishments and countries. At the establishment level, there is substantial variation in both MAX and MOST, with MOST showing a more skewed distribution. MAX and MOST follow different lifecycle patterns in low-income countries and among small establishments, and they exhibit different associations with several establishment characteristics and performance indicators. This evidence underscores the different nature of the technology upgrading processes that drive MAX and MOST.

The replicability package for the paper is available at: <https://reproducibility.worldbank.org/catalog/463>.

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Establishments.

Version

VERSION DATE

2026-01-30

VERSION NOTES

Edited, anonymised datasets for public distribution

Coverage

GEOGRAPHIC COVERAGE

Bangladesh; Brazil (Ceará, Paraná, and São Paulo); Burkina Faso; Cambodia; Chile; Croatia; Ethiopia; Georgia; Ghana; India (Uttar Pradesh, Tamil Nadu, Gujarat, and Maharashtra); Kenya; Poland; Senegal; South Korea; and Vietnam. Brazil refers to the states of Ceará, Paraná, and São Paulo. India refers to the states of Tamil Nadu, Uttar Pradesh, Gujarat, and Maharashtra.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Xavier Cirera	The World Bank
Diego Comin	Dartmouth College
Marcio Cruz	IFC

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
The World Bank Group	WBG	Financial Support
World Bank Group Partnership Facility	KWPF	Financial Support
Competitive Industries and Innovation Program	CIIP	Financial Support
InfoDev Multi-Donor Trust Fund	InfoDev	Financial Support

Sampling

SAMPLING PROCEDURE

The sampling frame is based on the most comprehensive and up-to-date establishment-level census data available from the respective National Statistical Office (NSOs) or similar. The samples are nationally representative for formal establishments

with five or more workers. The exceptions are Brazil and India, for which data collection was restricted to the States of Ceará, Paraná, and São Paulo, in Brazil, and Tamil Nadu, Uttar Pradesh, Gujarat, and Maharashtra, in India.

The sample stratifies the universe of establishments by firm size, sector of activity, and geographic regions. The sample is representative across these dimensions.

Section 2 and Appendix A of Cirera, X., Comin, D., & Cruz, M. (Forthcoming) provide detailed information about the sampling frame and sample design.

RESPONSE RATE

Country Response rate

Bangladesh 30%

Brazil 39%

Burkina Faso 45%

Cambodia 16%

Chile 40%

Croatia 15%

Ethiopia 42%

Georgia 86%

Ghana 49%

India 49%

Kenya 77%

Korea* 24%

Poland 47%

Senegal 57%

Vietnam 80%

Average across countries 46%

WEIGHTING

Appendix A4 of Cirera, X., Comin, D., & Cruz, M. (Forthcoming) provides detailed information about the sampling weights.

Data collection

DATES OF DATA COLLECTION

Start	End	Cycle
2019-06-01	2023-12-30	1

DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

DATA COLLECTION NOTES

The data used in the paper corresponds to the first and second phase of the survey implementation. The surveys were administered between June 2019 and the end of 2023 by the World Bank in partnership with public or private local agencies across ten countries: Bangladesh, Brazil (the state of Ceará), Senegal, and Vietnam in the first phase until January 2020. In the second phase, conducted during the COVID-19 pandemic, after January 2020, it included Brazil (the states of Paraná and São Paulo), Burkina Faso, India (the states of Tamil Nadu and Uttar Pradesh), Georgia, Ghana, Kenya, Poland, and the Republic of Korea. The mode of data collection was primarily face-to-face before the pandemic and mostly via telephone during the pandemic.

Questionnaires

QUESTIONNAIRES

The questionnaire is provided for download in English.

Data Processing

DATA EDITING

The description of the data processing is provided in the paper, along with the dictionary for each variable included in the dataset.

Additional information for each country will be provided in a complementary document, as part of the "The Firm-level Adoption of Technology (FAT) Survey" project.

Data Appraisal

DATA APPRAISAL

Section 2 of Cirera, X., Comin, D., & Cruz, M. (Forthcoming) provides detailed information on several quality checks to validate the survey and the data, including comparability with official business statistics from external sources.

Access policy

CONTACTS

Name	Affiliation	Email
Marcio Cruz	DECPM	marciocruz@ifc.org
Xavier Cirera	WKPTC	xcirera@worldbank.org

CONFIDENTIALITY

Publicly available.

CITATION REQUIREMENTS

Use of the dataset must be acknowledged using a citation which would include:

- the Identification of the Primary Investigator
- the title of the survey (including country, acronym and year of implementation)
- the survey reference number
- the source and date of download

In addition to the dataset citation, users of the dataset must also cite the journal publication as follows:

Cirera, X., Comin, D., & Cruz, M. (Forthcoming). Technology Sophistication Across Establishments. The Quarterly Journal of Economics.

ACCESS AUTHORITY

Name	Affiliation	Email
Marcio Cruz	DECPM	marciocruz@ifc.org
Xavier Cirera	WKPTC	xcirera@worldbank.org

Disclaimer and copyrights

DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

Metadata production

DDI DOCUMENT ID

DDI_WLD_2019-2023_FAT_v01_M_WB

PRODUCERS

Name	Abbreviation	Affiliation	Role
------	--------------	-------------	------

Development Data Group	DECDG	World Bank	Documentation of the study
------------------------	-------	------------	----------------------------

DATE OF METADATA PRODUCTION

2026-02-19

DDI DOCUMENT VERSION

Version 01

Data Dictionary

Data file	Cases	Variables
fat0_raw_data_qje Firm-level Adoption of Technology (FAT) dataset: This is the main microdata with the variables from the Firm-level Adoption of Technology (FAT) survey used in the paper - Technology Sophistication Across Establishments.	21055	723
isic_data ISIC Rev. 4 sector classification data	21055	4

Data file: fat0_raw_data_qje

Firm-level Adoption of Technology (FAT) dataset: This is the main microdata with the variables from the Firm-level Adoption of Technology (FAT) survey used in the paper - Technology Sophistication Across Establishments.

Cases: 21055

Variables: 723

Variables

ID	Name	Label	Question
V1	s1b	Sampling size	
V2	s4	Multi-Establishment	
V3	s7	Number of workers (screener)	
V4	a3b	Private foreign ownership %	
V5	a4b	Founder - Ownership	
V6	a5a	Sector - group	
V7	a6	Year of beginning operations	
V8	a7a	Top Manager - Experience Same Sector	
V9	a7b	Top Manager - Female	
V10	a7c	Top Manager - Highest Education	
V11	a7d	Top Manager - Studied Abroad	
V12	b1a	Electrical Connection	
V13	b1b	Power Outages - Year	
V14	b4a	No. of Desktop or Laptops	
V15	b5a	Internet connection	
V16	b7a	Production compared to other firms in country	
V17	b7b	Production compared to other firms in world	
V18	b8c	Years using b8a4, b8a5	
V19	b9c	Years using b9a4, b9a5	
V20	b10c	Years using b10a4, b10a5	
V21	b11c	Years using b11a4, b11a5	
V22	b12c	Years using b12a3, b12a4, b12a5, b12a6	
V23	b13d	Years using b12b4, b13b5, b13b6	
V24	b14c	Years using b14a5, b14a6	
V25	b15c	Years using b15a4, b15a5	
V26	c1_1d	Years using c1_1b4	
V27	c1_2d	Years using c1_2b5, c1_2b6	
V28	c1_3d	Years using c1_3b6, c1_3b7	
V29	c1_4d	Years using c1_4b4, c1_4b5	
V30	c1_5d	Years using c1_5b3, c1_5b4, c1_5b5	
V31	c1_6d	Years using c1_6b, c1_6b4	
V32	c2_1d	Years using c2_1b3, c2_1b4	
V33	c2_2d	Years using c2_2b5, c2_2b6, c2_2b7	
V34	c2_3d	Years using c2_3b3, c2_3b4	
V35	c2_4d	Years using c2_4b5, c2_4b6, c2_4b7	
V36	c2_5d	Years using c2_5b4	

ID	Name	Label	Question
V37	c3_1d	Years using c3_1b4	
V38	c3_2d	Years using c3_2b3, c3_2b4	
V39	c3_3d	Years using c3_3b3, c3_3b4	
V40	c3_4d	Years using c3_4b3, c_3b4	
V41	c3_5d	Years using c3_5b3, c3_5b4	
V42	c4_1d	Years using c4_1b2, c4_1b3	
V43	c4_2d	Years using c4_2b4, c4_2b5	
V44	c4_3d	Years using c4_3b3, c4_3b4, c4_3b5	
V45	c4_4d	Years using c4_4b3, c4_4b4, c4_4b5	
V46	c5_1d	Years using c5_1b4, c5_1b5, c5_1b6	
V47	c5_2d	Years using c5_2b4, c5_2b5 ,c5_2b6	
V48	c5_3d	Years using c5_3b3, c5_3b4	
V49	c5_4d	Years using c5_4b3, c5_4b4	
V50	c5_5d	Years using c5_5b2, c5_5b3	
V51	c6_1d	Years using c6_1b3, c6_1b4	
V52	c6_2d	Years using c6_2b4	
V53	c6_3d	Years using c6_3b3, c6_3b4, c6_3b5	
V54	c6_4d	Years using c6_4b3, c6_4b4	
V55	c6_5d	Years using c6_5b2, c6_5b3	
V56	c6_6d	Years using c6_6b2, c6_6b3	
V57	c7_1d	Years using c7_1b3, c7_1b4, c7_1b5	
V58	c7_2d	Years using c7_2b4, c7_2b5	
V59	c7_3d	Years using c7_3b3, c7_3b4	
V60	c7_4d	Years using c7_4b4, c7_4b5	
V61	c7_5d	Years using c7_5b5, c7_5b6	
V62	c8_1d	Years using c8_1b3, c8_1b4	
V63	c8_2d	Years using c8_2b4, c8_2b5, c8_2b6	
V64	c8_3d	Years using c8_3b2, c8_3b4	
V65	c8_4d	Years using c8_4b3, c8_4b4	
V66	c8_5d	Years using c8_5b2, c8_5b3	
V67	c9_1d	Years using c9_1b3, c9_1b4	
V68	c9_2d	Years using c9_2b3, c9_2b4, c9_2b5	
V69	c9_3d	Years using c9_3b3, c9_3b4, c9_3b5	
V70	c9_4d	Years using c9_4b3, c9_4b4, c9_4b5	
V71	c9_5d	Years using c9_5b3, c9_5b4	
V72	c10_2d	Years using c10_2b3, c10_2b4	
V73	c10_3d	Years using c10_3b3, c10_3b4	
V74	c10_4d	Years using c10_4c2	
V75	c11_1d	Years using c11_1b2, c11_1b3	
V76	c11_2d	Years using c11_2b4, c11_2b5	
V77	c11_3d	Years using c11_3b3, c11_3b4, c11_cb5	
V78	c11_4d	Years using c11_4b3, c11_4b4, c11_4b5	
V79	d1a	Purchase/Lease - Equip. or Mach.	
V80	d1b	Purchase or Lease - Software License	
V81	d1c	Dev., Custom. or Modif. of Machine or Software	

ID	Name	Label	Question
V82	d3a	Loan - mach., equip or licensing	
V83	d3c	No. - needed to borrow but not get it	
V84	d4a	Formal Incentives - Money, gift, or recognition	
V85	d4b	No. KPIs monitored	
V86	d4c	Frequency monitoring the KPIs	
V87	d4d	Time frame - production targets	
V88	d6a	Did export?	
V89	d6b	Direct Exports (% of sales)	
V90	d6c	Imported inputs, machines or equipment?	
V91	e1a	No. of permanent workers, full-time (ref_year1)	
V92	e1b	No. of permanent workers, part-time (ref_year1)	
V93	e1c	No. of temporary or seasonal workers, full-time (ref_year1)	
V94	e1d	No. of temporary or seasonal workers, part-time (ref_year1)	
V95	e5c	% of workers - vocational training	
V96	e5d	% of workers - completed college degree or more	
V97	e6a	Total sales (ref_year1)	
V98	e7a	Total labor cost (ref_year1)	
V99	e7b	Total material cost (ref_year1)	
V100	e7c	Total energy cost (ref_year1)	
V101	e7d	Operation cost (ref_year1)	
V102	e8a	Equipment cost (ref_year1)	
V103	e8b	Building cost (ref_year1)	
V104	e10a	Main product - % share in total sales	
V105	e10b	Main product - average markup	
V106	country	Country	
V107	firmid		
V108	s1c_rev	Sampling location	
V109	formality	Formal Sector	
V110	base_wt	Sampling Weight	
V111	e1	Total no. workers by end of (ref_year1)	
V112	db8a1	Adopted - Business Administration - Handwritten Processes	
V113	db8a2	Adopted - Business Administration - Computers (standard softwares)	
V114	db8a3	Adopted - Business Administration - Mobile Apps or Digital Platform	
V115	db8a4	Adopted - Business Administration - Computers (specialised softwares)	
V116	db8a5	Adopted - Business Administration - ERP	
V117	db9a1	Adopted - Production Planning - Handwritten processes	
V118	db9a2	Adopted - Production Planning - Computers (standard softwares)	
V119	db9a3	Adopted - Production Planning - Mobile Apps or digital platforms	
V120	db9a4	Adopted - Production Planning - Specialized software	
V121	db9a5	Adopted - Production Planning - ERP	
V122	db10a1	Adopted - Suppliers - manual search	
V123	db10a2	Adopted - Suppliers - management of supply chain info	
V124	db10a3	Adopted - Suppliers - online social media	
V125	db10a4	Adopted - Suppliers - SRM (not integrated w prod planning)	
V126	db10a5	Adopted - Suppliers - SRM (integrated w prod planning)	

ID	Name	Label	Question
V127	db11a1	Adopted - Marketing - Face to Face Chat	
V128	db11a2	Adopted - Marketing - Online Chat	
V129	db11a3	Adopted - Marketing - Structured Surveys	
V130	db11a4	Adopted - Marketing - CRM	
V131	db11a5	Adopted - Marketing - Big Data Analytics	
V132	db12a1	Adopted - Fabrication - Manual	
V133	db12a2	Adopted - Fabrication - Machines w/o computer	
V134	db12a3	Adopted - Fabrication - Computer	
V135	db12a4	Adopted - Fabrication - Robots	
V136	db12a5	Adopted - Fabrication - Additive manufacturing	
V137	db12a6	Adopted - Fabrication - Other Adv. Processes	
V138	db13b1	Adopted - Sales - Establishment Premises	
V139	db13b2	Adopted - Sales - Phone, email or sales representatives	
V140	db13b3	Adopted - Sales - Social media platforms/apps	
V141	db13b4	Adopted - Sales - Online Sales (ext. dig. platforms)	
V142	db13b5	Adopted - Sales - Online Sales (own website)	
V143	db13b6	Adopted - Sales - Electronic orders	
V144	db14a1	Adopted - Payment - goods exchange	
V145	db14a2	Adopted - Payment - cash	
V146	db14a3	Adopted - Payment - Cheque, voucher, bank wire	
V147	db14a4	Adopted - Payment - Cards	
V148	db14a5	Adopted - Payment - Online/electronic	
V149	db14a6	Adopted - Payment - Online (platforms)	
V150	db14a7	Adopted - Payment - Cryptocurrency	
V151	db15a1	Adopted - Quality Control - Manual, Visual or Written	
V152	db15a2	Adopted - Quality Control - Human Inspection	
V153	db15a3	Adopted - Quality Control - Statistical Control	
V154	db15a4	Adopted - Quality Control - Automated	
V155	dc1_0a1	Adopted - Crops: Info. sources - Radio	
V156	dc1_0a2	Adopted - Crops: Info. sources - TV	
V157	dc1_0a3	Adopted - Crops: Info. sources - Non-internet mobile	
V158	dc1_0a4	Adopted - Crops: Info. sources - Mobile internet tech	
V159	dc1_0a5	Adopted - Crops: Info. sources - Meet other producers	
V160	dc1_0a6	Adopted - Crops: Info. sources - Pub. or Pvt. agent visit	
V161	dc1_0a7	Adopted - Crops: Info. sources - Precision agriculture	
V162	dc1_1b1	Adopted - Land prep - Manual plowing (simple tools)	
V163	dc1_1b2	Adopted - Land prep - Animal Aided	
V164	dc1_1b3	Adopted - Land prep - Manually operated machines	
V165	dc1_1b4	Adopted - Land prep - Digitally operated tractors or equipment	
V166	dc1_2b1	Adopted - Irrig.- Rain-fed, no additional irrig.	
V167	dc1_2b2	Adopted - Irrig. - Manual irrig.	
V168	dc1_2b3	Adopted - Irrig. - Surface Flood Irrig.	
V169	dc1_2b4	Adopted - Irrig. - Small Pump	
V170	dc1_2b5	Adopted - Irrig. - Drip, localized, underground, Sprinkler, centre pivot	
V171	dc1_2b6	Adopted - Irrig. - Automated	

ID	Name	Label	Question
V172	dc1_3b1	Adopted - Weeding/pest control - Manual application	
V173	dc1_3b2	Adopted - Weeding/pest control - Mechanical application	
V174	dc1_3b3	Adopted - Weeding/pest control - Biological methods	
V175	dc1_3b4	Adopted - Weeding/pest control - Precision agriculture	
V176	dc1_3b5	Adopted - Weeding/pest control - Advanced precision agriculture	
V177	dc1_4b1	Adopted - Harvesting, training, or pruning - Manual	
V178	dc1_4b2	Adopted - Harvesting, training, or pruning - Animal Aided	
V179	dc1_4b3	Adopted - Harvesting, training, or pruning - Human-operated machines	
V180	dc1_4b4	Adopted - Harvesting, training, or pruning - Manually mechanised	
V181	dc1_4b5	Adopted - Harvesting, training, or pruning - Digitally automated	
V182	dc1_5b1	Adopted - Storage facility - Precarious	
V183	dc1_5b2	Adopted - Storage facility - Protected (w/o temp. control)	
V184	dc1_5b3	Adopted - Storage facility - Special Storage (temp. control)	
V185	dc1_5b4	Adopted - Storage facility - High-end central storage	
V186	dc1_5b5	Adopted - Storage facility - Cont. temp. monitoring	
V187	dc1_6b1	Adopted - Packing - Manual	
V188	dc1_6b2	Adopted - Packing - Human-operated mech. equip.	
V189	dc1_6b3	Adopted - Packing - Automated	
V190	dc1_6b4	Adopted - Packing - Modified atmosphere	
V191	dc2_0a1	Adopted - Livestock: Info sources - Radio	
V192	dc2_0a2	Adopted - Livestock: Info sources - TV	
V193	dc2_0a3	Adopted - Livestock: Info sources - Non-internet mobile	
V194	dc2_0a4	Adopted - Livestock: Info sources - Mobile internet tech	
V195	dc2_0a5	Adopted - Livestock: Info sources - Meet other producers	
V196	dc2_0a6	Adopted - Livestock: Info sources - Pub or pvt agen visits	
V197	dc2_0a7	Adopted - Livestock: Info sources - Precision agri tools	
V198	dc2_1b1	Adopted - Breeding/genetic - Breed substitution	
V199	dc2_1b2	Adopted - Breeding/genetic - Inbreeding or Crossbreeding	
V200	dc2_1b3	Adopted - Breeding/genetic - Artificial insemination (AI)	
V201	dc2_1b4	Adopted - Breeding/genetic - Selective breeding	
V202	dc2_2b1	Adopted - Animal nutrition - Household waste or fibrous crop residues	
V203	dc2_2b2	Adopted - Animal nutrition - Natural grasslands and pastures	
V204	dc2_2b3	Adopted - Animal nutrition - Integrated crop-livestock systems	
V205	dc2_2b4	Adopted - Animal nutrition - Production of forage crops	
V206	dc2_2b5	Adopted - Animal nutrition - Production of supplementary feed	
V207	dc2_2b6	Adopted - Animal nutrition - Manu. or mixing of feed	
V208	dc2_2b7	Adopted - Animal nutrition - Prod. of genetically-modified feed	
V209	dc2_3b1	Adopted - Animal healthcare - Rapid diagnostic tests	
V210	dc2_3b2	Adopted - Animal healthcare - Pest sprays	
V211	dc2_3b3	Adopted - Animal healthcare - Vaccines	
V212	dc2_3b4	Adopted - Animal healthcare - DNA or RNA vaccine	
V213	dc2_3b5	Adopted - Animal healthcare - Disease med.	
V214	dc2_4b1	Adopted - Herd mgt/monitoring - Human	
V215	dc2_4b2	Adopted - Herd mgt/monitoring - Animal-aided	
V216	dc2_4b3	Adopted - Herd mgt/monitoring - Feedlots or grazing	

ID	Name	Label	Question
V217	dc2_4b4	Adopted - Herd mgt/monitoring - Automated cameras/video	
V218	dc2_4b5	Adopted - Herd mgt/monitoring - Unmanned aerial	
V219	dc2_4b6	Adopted - Herd mgt/monitoring - Analog tracking	
V220	dc2_4b7	Adopted - Herd mgt/monitoring - Digital tracking	
V221	dc2_5b1	Adopted - Transp. livestock - Manual	
V222	dc2_5b2	Adopted - Transp. livestock - Non-motorized vehicles	
V223	dc2_5b3	Adopted - Transp. livestock - Motorized vehicles	
V224	dc2_5b4	Adopted - Transp. livestock - Specialized/climate-controlled vehicles	
V225	dc3_1b1	Adopted - Input testing - Sensory	
V226	dc3_1b2	Adopted - Input testing - Review of supplier testing	
V227	dc3_1b3	Adopted - Input testing - Non-computer-controlled	
V228	dc3_1b4	Adopted - Input testing - Computer testing	
V229	dc3_2b1	Adopted - Food prep. - Manual	
V230	dc3_2b2	Adopted - Food prep. - Mech. equipment (human force)	
V231	dc3_2b3	Adopted - Food prep. - Power equipment (human interaction)	
V232	dc3_2b4	Adopted - Food prep. - Power equipment (computers or robotics, minimal int.)	
V233	dc3_3b1	Adopted - Anti-bacterial - Minimal-processing preservation	
V234	dc3_3b2	Adopted - Anti-bacterial - Anti-bacterial wash or soaking	
V235	dc3_3b3	Adopted - Anti-bacterial - Thermal Processing	
V236	dc3_3b4	Adopted - Anti-bacterial - Other adv. methods	
V237	dc3_4b1	Adopted - Food pkg. - Manual	
V238	dc3_4b2	Adopted - Food pkg. - Human-operated mech. equip.	
V239	dc3_4b3	Adopted - Food pkg. - Power equip. (human interaction)	
V240	dc3_4b4	Adopted - Food pkg. - Power equip. (comp./robotics, min. human int.)	
V241	dc3_5b1	Adopted - Food storage - Minimal protection (some exposure)	
V242	dc3_5b2	Adopted - Food storage - Ambient conditions (closed building)	
V243	dc3_5b3	Adopted - Food storage - Some climate control (secured building)	
V244	dc3_5b4	Adopted - Food storage - Automated climate (security-controlled building)	
V245	dc4_1b1	Adopted - Design drawing - Manual/hand-draw	
V246	dc4_1b2	Adopted - Design drawing - Digital/semi-digital design	
V247	dc4_1b3	Adopted - Design drawing - CAD	
V248	dc4_2b1	Adopted - Cutting - Manual cutting	
V249	dc4_2b2	Adopted - Cutting - Cutting machine (manually operated)	
V250	dc4_2b3	Adopted - Cutting - Semi-Automatic cutting machine	
V251	dc4_2b4	Adopted - Cutting - Automatic/Computerized cutting machine (no Laser)	
V252	dc4_2b5	Adopted - Cutting - Automatic/Computerized cutting machine (Laser)	
V253	dc4_3b1	Adopted - Sewing - Manually	
V254	dc4_3b2	Adopted - Sewing - Machine (manually operated)	
V255	dc4_3b3	Adopted - Sewing - Semi-automated machines	
V256	dc4_3b4	Adopted - Sewing - Automated machines	
V257	dc4_3b5	Adopted - Sewing - 3D Knitting	
V258	dc4_4b1	Adopted - Finishing/ironing - Basic manual ironing	
V259	dc4_4b2	Adopted - Finishing/ironing - Electric high-pressure steam iron	
V260	dc4_4b3	Adopted - Finishing/ironing - Tunnel finisher	
V261	dc4_4b4	Adopted - Finishing/ironing - Form finishing machine	

ID	Name	Label	Question
V262	dc4_4b5	Adopted - Finishing/ironing - High tech pressing machine	
V263	dc5_1b1	Adopted - Assembly/fabrication - Machines (controlled by operators)	
V264	dc5_1b2	Adopted - Assembly/fabrication - FMC or FMS	
V265	dc5_1b3	Adopted - Assembly/fabrication - Lasers (materials processing)	
V266	dc5_1b4	Adopted - Assembly/fabrication - CNC machinery	
V267	dc5_1b5	Adopted - Assembly/fabrication - Robots	
V268	dc5_1b6	Adopted - Assembly/fabrication - Additive manufacturing	
V269	dc5_2b1	Adopted - Body press/welding - Pressing of skin panels (operators)	
V270	dc5_2b2	Adopted - Body press/welding - Pressing of structural components (operators)	
V271	dc5_2b3	Adopted - Body press/welding - Welding of main body (operators)	
V272	dc5_2b4	Adopted - Body press/welding - Pressing of skin panels (automated)	
V273	dc5_2b5	Adopted - Body press/welding - Pressing of structural components (automated)	
V274	dc5_2b6	Adopted - Body press/welding - Welding of main body (automated)	
V275	dc5_3b1	Adopted - Painting - Water-based painting (operators)	
V276	dc5_3b2	Adopted - Painting - Solvent-based painting (operators)	
V277	dc5_3b3	Adopted - Painting - Water-based painting (automated)	
V278	dc5_3b4	Adopted - Painting - Solvent-based painting (automated)	
V279	dc5_4b1	Adopted - Plastic injection- Non-visible interior plastic (operators)	
V280	dc5_4b2	Adopted - Plastic injection - Plastic exterior body parts (operators)	
V281	dc5_4b3	Adopted - Plastic injection- Non-visible interior plastic (robotics)	
V282	dc5_4b4	Adopted - Plastic injection - Plastic exterior body parts (robotics)	
V283	dc5_5b1	Adopted - Productive asset mgt. - Breakdown maintenance	
V284	dc5_5b2	Adopted - Productive asset mgt. - Preventative/predictive maintenance	
V285	dc5_5b3	Adopted - Productive asset mgt. - Model Based Condition Monitoring	
V286	dc6_1b1	Adopted - Air filtration - Unfiltered air	
V287	dc6_1b2	Adopted - Air filtration - Basic	
V288	dc6_1b3	Adopted - Air filtration - HEPA	
V289	dc6_1b4	Adopted - Air filtration - Ultra HEPA, pressurization control	
V290	dc6_2b1	Adopted - Weighting - Beam Scales	
V291	dc6_2b2	Adopted - Weighting - Analog Scales	
V292	dc6_2b3	Adopted - Weighting - Electronic Scales	
V293	dc6_2b4	Adopted - Weighting - Automated Weighing	
V294	dc6_3b1	Adopted - Mixing/compounding - Manual	
V295	dc6_3b2	Adopted - Mixing/compounding - Planetary Mixers OR homogenizers	
V296	dc6_3b3	Adopted - Mixing/compounding - High Speed, High Shear Granulators	
V297	dc6_3b4	Adopted - Mixing/compounding - Fluid Bed Processors (not with syrups)	
V298	dc6_3b5	Adopted - Mixing/compounding - Fully Automated Compounding	
V299	dc6_4b1	Adopted - Compression/encapsulation - Manual	
V300	dc6_4b2	Adopted - Compression/encapsulation - Motorized	
V301	dc6_4b3	Adopted - Compression/encapsulation - Automated	
V302	dc6_4b4	Adopted - Compression/encapsulation - Integrated	
V303	dc6_5b1	Adopted - Quality control - Manual, titrimetric/chromatographic	
V304	dc6_5b2	Adopted - Quality control - Elec. chromatography	
V305	dc6_5b3	Adopted - Quality control - Elec. chromatography w data acquisition	
V306	dc6_6b1	Adopted - Packaging - Manual filling pills or syrups	

ID	Name	Label	Question
V307	dc6_6b2	Adopted - Packaging - Slat Counters, Cottoners, etc; machine filling	
V308	dc6_6b3	Adopted - Packaging - Automated, integrated packaging lines	
V309	dc7_1b1	Adopted - Cust. serv. - Store	
V310	dc7_1b2	Adopted - Cust. serv. - Phone or Help Desk	
V311	dc7_1b3	Adopted - Cust. serv. - Social Media	
V312	dc7_1b4	Adopted - Cust. serv. - Online requests	
V313	dc7_1b5	Adopted - Cust. serv. - Chatbots	
V314	dc7_2b1	Adopted - Pricing - Manual Cost	
V315	dc7_2b2	Adopted - Pricing - Automated markup	
V316	dc7_2b3	Adopted - Pricing - Automated promotional	
V317	dc7_2b4	Adopted - Pricing - Dynamic pricing systems	
V318	dc7_2b5	Adopted - Pricing - Personalized pricing (predictive analytics)	
V319	dc7_3b1	Adopted - Merchandising - Manually selection	
V320	dc7_3b2	Adopted - Merchandising - Category mgt.	
V321	dc7_3b3	Adopted - Merchandising - Retail Merch. Systems or Digital Merch.	
V322	dc7_3b4	Adopted - Merchandising - Product trend analytics	
V323	dc7_4b1	Adopted - Inventory - Handwritten record keeping	
V324	dc7_4b2	Adopted - Inventory - Computer databases (manual updates)	
V325	dc7_4b3	Adopted - Inventory - WMS (specialised software)	
V326	dc7_4b4	Adopted - Inventory - CAO, vendor-managed, and/or radio-frequency identification	
V327	dc7_4b5	Adopted - Inventory - AS/RS	
V328	dc7_5b1	Adopted - Ad channels - Paper based communication	
V329	dc7_5b2	Adopted - Ad channels - Radio, Billboards, TV	
V330	dc7_5b3	Adopted - Ad channels - Email or mobile phone	
V331	dc7_5b4	Adopted - Ad channels - Social Media	
V332	dc7_5b5	Adopted - Ad channels - Search Engine Marketing	
V333	dc7_5b6	Adopted - Ad channels - Big data Analytics or AI	
V334	dc8_1b1	Adopted - Cust. serv. - Teller	
V335	dc8_1b2	Adopted - Cust. serv. - ATM machines	
V336	dc8_1b3	Adopted - Cust. serv. - On-line on company website	
V337	dc8_1b4	Adopted - Cust. serv. - Mobile app	
V338	dc8_2b1	Adopted - Verification id - Teller	
V339	dc8_2b2	Adopted - Verification id - online passwords	
V340	dc8_2b3	Adopted - Verification id - online passwords (combined)	
V341	dc8_2b4	Adopted - Verification id - Digital auth.	
V342	dc8_2b5	Adopted - Verification id - Biometrics	
V343	dc8_2b6	Adopted - Verification id - Blockchain	
V344	dc8_3b1	Adopted - Loan app - Loan officer (paper-based)	
V345	dc8_3b2	Adopted - Loan app - Mobile app + paper	
V346	dc8_3b3	Adopted - Loan app - Channel partners	
V347	dc8_4b1	Adopted - Credit approvals - Analyst (paper-based)	
V348	dc8_4b2	Adopted - Credit approvals - Analyst (digital info)	
V349	dc8_4b3	Adopted - Credit approvals - Automated	
V350	dc8_4b4	Adopted - Credit approvals - Algorithm (AI or Big-Data)	
V351	dc8_5b1	Adopted - Op. supp. - writing records	

ID	Name	Label	Question
V352	dc8_5b2	Adopted - Op. supp. - dig. accounting (PCs)	
V353	dc8_5b3	Adopted - Op. supp. - dig. network	
V354	dc9_1b1	Adopted - Transportation planning - handwritten info.	
V355	dc9_1b2	Adopted - Transportation planning - electronic file share	
V356	dc9_1b3	Adopted - Transportation planning - installed software	
V357	dc9_1b4	Adopted - Transportation planning - real time info. with ERP	
V358	dc9_2b1	Adopted - Loading - Manual process (fax, text, phone)	
V359	dc9_2b2	Adopted - Loading - Manual process (dig. platforms)	
V360	dc9_2b3	Adopted - Loading - web-based	
V361	dc9_2b4	Adopted - Loading - specific software interface via Internet	
V362	dc9_2b5	Adopted - Loading - file exchange (ERP integrated apps)	
V363	dc9_3b1	Adopted - Monitoring load/delivery - Event driven (fax, text, phone calls)	
V364	dc9_3b2	Adopted - Monitoring load/delivery - Event driven (digital)	
V365	dc9_3b3	Adopted - Monitoring load/delivery - Paper documentation	
V366	dc9_3b4	Adopted - Monitoring load/delivery - installed softwares	
V367	dc9_3b5	Adopted - Monitoring load/delivery - ERP integrated apps	
V368	dc9_4b1	Adopted - Transp. perf. - manually	
V369	dc9_4b2	Adopted - Transp. perf. - computer (non-specialized software)	
V370	dc9_4b3	Adopted - Transp. perf. - computer (specialised transp. reporting)	
V371	dc9_4b4	Adopted - Transp. perf. - installed software	
V372	dc9_4b5	Adopted - Transp. perf. - file exchange between ERP integrated	
V373	dc9_5b1	Adopted - Fleet management - manual	
V374	dc9_5b2	Adopted - Fleet management - electronic file	
V375	dc9_5b3	Adopted - Fleet management - ETM	
V376	dc9_5b4	Adopted - Fleet management - ERP and software	
V377	dc10_1a1	Adopted - Hosp. facilities - ER	
V378	dc10_1a2	Adopted - Hosp. facilities - Postoperative care area	
V379	dc10_1a3	Adopted - Hosp. facilities - ICU	
V380	dc10_1a4	Adopted - Hosp. facilities - Blood Bank	
V381	dc10_1a5	Adopted - Hosp. facilities - Testing labs	
V382	dc10_1a6	Adopted - Hosp. facilities - X-ray	
V383	dc10_1a7	Adopted - Hosp. facilities - ultrasound machine	
V384	dc10_1a8	Adopted - Hosp. facilities - CT scan	
V385	dc10_1a9	Adopted - Hosp. facilities - MRI machine	
V386	dc10_1a11	Adopted - Hosp. facilities - Pulse oximetry	
V387	dc10_1a10	Adopted - Hosp. facilities - ultrasound machine	
V388	dc10_2b1	Adopted - Scheduling - Personal visit and paper	
V389	dc10_2b2	Adopted - Scheduling - Phone call, SMS, or Email	
V390	dc10_2b3	Adopted - Scheduling - Software or app (w/o automated reminders)	
V391	dc10_2b4	Adopted - Scheduling - Software or app (w automated reminders)	
V392	dc10_3b1	Adopted - Patient records - Handwritten process	
V393	dc10_3b2	Adopted - Patient records - Digital patient records	
V394	dc10_3b3	Adopted - Patient records - EHR	
V395	dc10_3b4	Adopted - Patient records - Cloud-based HER	
V396	dc10_4c1	Adopted - Med. mgt./admin. - Handwritten	

ID	Name	Label	Question
V397	dc10_4c2	Adopted - Med. mgt./admin. - Barcode/electronic id	
V398	dc10_5a1	Always available- Sepsis treat. - antibiotics	
V399	dc10_5a2	Always available- Sepsis treat. - adv. therapies	
V400	dc10_5a3	Always available- Childbirth - C-section	
V401	dc10_5a4	Always available- Childbirth - High-risk labor	
V402	dc10_5a5	Always available- Trauma - Traction (closed fracture)	
V403	dc10_5a6	Always available- Trauma - Open Treatment of Fracture	
V404	dc10_5a7	Always available- Myocardial infarction/-strokes - defibrillation	
V405	dc10_5a8	Always available- Myocardial infarction/-strokes - angiography	
V406	dc11_1b1	Adopted - Design - Manual	
V407	dc11_1b2	Adopted - Design - Digital or semi-digital	
V408	dc11_1b3	Adopted - Design - CAD, 3D, or virtual	
V409	dc11_2b1	Adopted - Cutting - Manual	
V410	dc11_2b2	Adopted - Cutting - Machine manually-operated	
V411	dc11_2b3	Adopted - Cutting - Semi-automatic machine	
V412	dc11_2b4	Adopted - Cutting - Automatic/Computerised (no Laser)	
V413	dc11_2b5	Adopted - Cutting - Automatic/Computerised (Laser)	
V414	dc11_3b1	Adopted - Sewing - Manually	
V415	dc11_3b2	Adopted - Sewing - Machine (manually)	
V416	dc11_3b3	Adopted - Sewing - Machine (semi-automated)	
V417	dc11_3b4	Adopted - Sewing - Machine (automated)	
V418	dc11_3b5	Adopted - Sewing - 3D Knitting	
V419	dc11_4b1	Adopted - Assembly/Finishing - manual	
V420	dc11_4b2	Adopted - Assembly/Finishing - conveyor/assembly (static/semi-automated)	
V421	dc11_4b3	Adopted - Assembly/Finishing - conveyor/assembly (dynamic/automated)	
V422	dc11_4b4	Adopted - Assembly/Finishing - injection machine	
V423	dc11_4b5	Adopted - Assembly/Finishing - 3D printing	
V424	dc12_1b1	Adopted - Reservations - handwritten	
V425	dc12_1b2	Adopted - Reservations - digital (std software)	
V426	dc12_1b3	Adopted - Reservations - dedicated	
V427	dc12_1b4	Adopted - Reservations - PMS	
V428	dc12_1b5	Adopted - Reservations - cloud-based	
V429	dc12_2b1	Adopted - Accom Pricing - manual cost	
V430	dc12_2b2	Adopted - Accom Pricing - automated markup	
V431	dc12_2b3	Adopted - Accom Pricing - automated promotional	
V432	dc12_2b4	Adopted - Accom Pricing - dynamic pricing	
V433	dc12_2b5	Adopted - Accom Pricing - personalised pricing	
V434	dc12_3b1	Adopted - Housekeeping - handwritten	
V435	dc12_3b2	Adopted - Housekeeping - digital (std. software)	
V436	dc12_3b3	Adopted - Housekeeping - dedicated	
V437	dc12_3b4	Adopted - Housekeeping - PMS	
V438	dc12_3b5	Adopted - Housekeeping - cloud-based	
V439	dc12_4b1	Adopted - Laundry - manual	
V440	dc12_4b2	Adopted - Laundry - domestic	
V441	dc12_4b3	Adopted - Laundry - industrial (w automatic sheet fold)	

ID	Name	Label	Question
V442	dc12_4b4	Adopted - Laundry - industrial (w/o automatic sheet fold)	
V443	dc12_5b1	Adopted - PoS - handwritten	
V444	dc12_5b2	Adopted - PoS - digital records	
V445	dc12_5b3	Adopted - PoS - specialised software	
V446	dc12_5b4	Adopted - PoS - PMS	
V447	dc12_5b5	Adopted - PoS - cloud-based	
V448	ib8b1	Most used - Business Administration - Handwritten Processes	
V449	ib8b2	Most used - Business Administration - Computers (standard softwares)	
V450	ib8b3	Most used - Business Administration - Mobile Apps or Digital Platform	
V451	ib8b4	Most used - Business Administration - Computers (specialised softwares)	
V452	ib8b5	Most used - Business Administration - ERP	
V453	ib9b1	Most used - Production Planning - Handwritten processes	
V454	ib9b2	Most used - Production Planning - Computers (standard softwares)	
V455	ib9b3	Most used - Production Planning - Mobile Apps or digital platforms	
V456	ib9b4	Most used - Production Planning - Specialized software	
V457	ib9b5	Most used - Production Planning - ERP	
V458	ib10a1	Most used - Suppliers - manual search	
V459	ib10a2	Most used - Suppliers - management of supply chain info	
V460	ib10a3	Most used - Suppliers - online social media	
V461	ib10a4	Most used - Suppliers - SRM (not integrated w prod planning)	
V462	ib10a5	Most used - Suppliers - SRM (integrated w prod planning)	
V463	ib11b1	Most used - Marketing - Face to Face Chat	
V464	ib11b2	Most used - Marketing - Online Chat	
V465	ib11b3	Most used - Marketing - Structured Surveys	
V466	ib11b4	Most used - Marketing - CRM	
V467	ib11b5	Most used - Marketing - Big Data Analytics	
V468	ib13c1	Most used - Sales - Establishment Premises	
V469	ib13c2	Most used - Sales - Phone, email or sales representatives	
V470	ib13c3	Most used - Sales - Social media platforms/apps	
V471	ib13c4	Most used - Sales - Online Sales (ext. dig. platforms)	
V472	ib13c5	Most used - Sales - Online Sales (own website)	
V473	ib13c6	Most used - Sales - Electronic orders	
V474	ib14b1	Most used - Payment - goods exchange	
V475	ib14b2	Most used - Payment - cash	
V476	ib14b3	Most used - Payment - Cheque, voucher, bank wire	
V477	ib14b4	Most used - Payment - Cards	
V478	ib14b5	Most used - Payment - Online/electronic	
V479	ib14b6	Most used - Payment - Online (platforms)	
V480	ib14b7	Most used - Payment - Cryptocurrency	
V481	ib15b1	Most used - Quality Control - Manual, Visual or Written	
V482	ib15b2	Most used - Quality Control - Human Inspection	
V483	ib15b3	Most used - Quality Control - Statistical Control	
V484	ib15b4	Most used - Quality Control - Automated	
V485	ib12b1	Most used - Fabrication - Manual	
V486	ib12b2	Most used - Fabrication - Machines w/o computer	

ID	Name	Label	Question
V487	ib12b3	Most used - Fabrication - Computer	
V488	ib12b4	Most used - Fabrication - Robots	
V489	ib12b5	Most used - Fabrication - Additive manufacturing	
V490	ib12b6	Most used - Fabrication - Other Adv. Processes	
V491	ic1_1c1	Most used - Land prep - Manual plowing (simple tools)	
V492	ic1_1c2	Most used - Land prep - Animal Aided	
V493	ic1_1c3	Most used - Land prep - Manually operated machines	
V494	ic1_1c4	Most used - Land prep - Digitally operated tractors or equipment	
V495	ic1_2c1	Most used - Irrig.- Rain-fed, no additional irrig.	
V496	ic1_2c2	Most used - Irrig. - Manual irrig.	
V497	ic1_2c3	Most used - Irrig. - Surface Flood Irrig.	
V498	ic1_2c4	Most used - Irrig. - Small Pump	
V499	ic1_2c5	Most used - Irrig. - Drip, localized, underground, Sprinkler, centre pivot	
V500	ic1_2c6	Most used - Irrig. - Automated	
V501	ic1_3c1	Most used - Weeding/pest control - Manual application	
V502	ic1_3c2	Most used - Weeding/pest control - Mechanical application	
V503	ic1_3c3	Most used - Weeding/pest control - Biological methods	
V504	ic1_3c4	Most used - Weeding/pest control - Precision agriculture	
V505	ic1_3c5	Most used - Weeding/pest control - Advanced precision agriculture	
V506	ic1_4c1	Most used - Harvesting, training, or pruning - Manual	
V507	ic1_4c2	Most used - Harvesting, training, or pruning - Animal Aided	
V508	ic1_4c3	Most used - Harvesting, training, or pruning - Human-operated machines	
V509	ic1_4c4	Most used - Harvesting, training, or pruning - Manually mechanised	
V510	ic1_4c5	Most used - Harvesting, training, or pruning - Digitally automated	
V511	ic1_5c1	Most used - Storage facility - Precarious	
V512	ic1_5c2	Most used - Storage facility - Protected (w/o temp. control)	
V513	ic1_5c3	Most used - Storage facility - Special Storage (temp. control)	
V514	ic1_5c4	Most used - Storage facility - High-end central storage	
V515	ic1_5c5	Most used - Storage facility - Cont. temp. monitoring	
V516	ic1_6c1	Most used - Packing - Manual	
V517	ic1_6c2	Most used - Packing - Human-operated mech. equip.	
V518	ic1_6c3	Most used - Packing - Automated	
V519	ic1_6c4	Most used - Packing - Modified atmosphere	
V520	ic2_1c1	Most used - Breeding/genetic - Breed substitution	
V521	ic2_1c2	Most used - Breeding/genetic - Inbreeding or Crossbreeding	
V522	ic2_1c3	Most used - Breeding/genetic - Artificial insemination (AI)	
V523	ic2_1c4	Most used - Breeding/genetic - Selective breeding	
V524	ic2_2c1	Most used - Animal nutrition - Household waste or fibrous crop residues	
V525	ic2_2c2	Most used - Animal nutrition - Natural grasslands and pastures	
V526	ic2_2c3	Most used - Animal nutrition - Integrated crop-livestock systems	
V527	ic2_2c4	Most used - Animal nutrition - Production of forage crops	
V528	ic2_2c5	Most used - Animal nutrition - Production of supplementary feed	
V529	ic2_2c6	Most used - Animal nutrition - Manu. or mixing of feed	
V530	ic2_2c7	Most used - Animal nutrition - Prod. of genetically-modified feed	
V531	ic2_3c1	Most used - Animal healthcare - Rapid diagnostic tests	

ID	Name	Label	Question
V532	ic2_3c2	Most used - Animal healthcare - Pest sprays	
V533	ic2_3c3	Most used - Animal healthcare - Vaccines	
V534	ic2_3c4	Most used - Animal healthcare - DNA or RNA vaccine	
V535	ic2_3c5	Most used - Animal healthcare - Disease med.	
V536	ic2_4c1	Most used - Herd mgt/monitoring - Human	
V537	ic2_4c2	Most used - Herd mgt/monitoring - Animal-aided	
V538	ic2_4c3	Most used - Herd mgt/monitoring - Feedlots or grazing	
V539	ic2_4c4	Most used - Herd mgt/monitoring - Automated cameras/video	
V540	ic2_4c5	Most used - Herd mgt/monitoring - Unmanned aerial	
V541	ic2_4c6	Most used - Herd mgt/monitoring - Analog tracking	
V542	ic2_4c7	Most used - Herd mgt/monitoring - Digital tracking	
V543	ic2_5c1	Most used - Transp. livestock - Manual	
V544	ic2_5c2	Most used - Transp. livestock - Non-motorized vehicles	
V545	ic2_5c3	Most used - Transp. livestock - Motorized vehicles	
V546	ic2_5c4	Most used - Transp. livestock - Specialized/climate-controlled vehicles	
V547	ic3_1c1	Most used - Input testing - Sensory	
V548	ic3_1c2	Most used - Input testing - Review of supplier testing	
V549	ic3_1c3	Most used - Input testing - Non-computer-controlled	
V550	ic3_1c4	Most used - Input testing - Computer testing	
V551	ic3_2c1	Most used - Food prep. - Manual	
V552	ic3_2c2	Most used - Food prep. - Mech. equipment (human force)	
V553	ic3_2c3	Most used - Food prep. - Power equipment (human interaction)	
V554	ic3_2c4	Most used - Food prep. - Power equipment (computers or robotics, minimal int.)	
V555	ic3_3c1	Most used - Anti-bacterial - Minimal-processing preservation	
V556	ic3_3c2	Most used - Anti-bacterial - Anti-bacterial wash or soaking	
V557	ic3_3c3	Most used - Anti-bacterial - Thermal Processing	
V558	ic3_3c4	Most used - Anti-bacterial - Other adv. methods	
V559	ic3_4c1	Most used - Food pkg. - Manual	
V560	ic3_4c2	Most used - Food pkg. - Human-operated mech. equip.	
V561	ic3_4c3	Most used - Food pkg. - Power equip. (human interaction)	
V562	ic3_4c4	Most used - Food pkg. - Power equip. (comp./robotics, min. human int.)	
V563	ic3_5c1	Most used - Food storage - Minimal protection (some exposure)	
V564	ic3_5c2	Most used - Food storage - Ambient conditions (closed building)	
V565	ic3_5c3	Most used - Food storage - Some climate control (secured building)	
V566	ic3_5c4	Most used - Food storage - Automated climate (security-controlled building)	
V567	ic4_1c1	Most used - Design drawing - Manual/hand-draw	
V568	ic4_1c2	Most used - Design drawing - Digital/semi-digital design	
V569	ic4_1c3	Most used - Design drawing - CAD	
V570	ic4_2c1	Most used - Cutting - Manual cutting	
V571	ic4_2c2	Most used - Cutting - Cutting machine (manually operated)	
V572	ic4_2c3	Most used - Cutting - Semi-Automatic cutting machine	
V573	ic4_2c4	Most used - Cutting - Automatic/Computerized cutting machine (no Laser)	
V574	ic4_2c5	Most used - Cutting - Automatic/Computerized cutting machine (Laser)	
V575	ic4_3c1	Most used - Sewing - Manually	
V576	ic4_3c2	Most used - Sewing - Machine (manually operated)	

ID	Name	Label	Question
V577	ic4_3c3	Most used - Sewing - Semi-automated machines	
V578	ic4_3c4	Most used - Sewing - Automated machines	
V579	ic4_3c5	Most used - Sewing - 3D Knitting	
V580	ic4_4c1	Most used - Finishing/ironing - Basic manual ironing	
V581	ic4_4c2	Most used - Finishing/ironing - Electric high-pressure steam iron	
V582	ic4_4c3	Most used - Finishing/ironing - Tunnel finisher	
V583	ic4_4c4	Most used - Finishing/ironing - Form finishing machine	
V584	ic4_4c5	Most used - Finishing/ironing - High tech pressing machine	
V585	ic5_1c1	Most used - Assembly/fabrication - Machines (controlled by operators)	
V586	ic5_1c2	Most used - Assembly/fabrication - FMC or FMS	
V587	ic5_1c3	Most used - Assembly/fabrication - Lasers (materials processing)	
V588	ic5_1c4	Most used - Assembly/fabrication - CNC machinery	
V589	ic5_1c5	Most used - Assembly/fabrication - Robots	
V590	ic5_1c6	Most used - Assembly/fabrication - Additive manufacturing	
V591	ic5_2c1	Most used - Body press/welding - Pressing of skin panels (operators)	
V592	ic5_2c2	Most used - Body press/welding - Pressing of structural components (operators)	
V593	ic5_2c3	Most used - Body press/welding - Welding of main body (operators)	
V594	ic5_2c4	Most used - Body press/welding - Pressing of skin panels (automated)	
V595	ic5_2c5	Most used - Body press/welding - Pressing of structural components (automated)	
V596	ic5_2c6	Most used - Body press/welding - Welding of main body (automated)	
V597	ic5_3c1	Most used - Painting - Water-based painting (operators)	
V598	ic5_3c2	Most used - Painting - Solvent-based painting (operators)	
V599	ic5_3c3	Most used - Painting - Water-based painting (automated)	
V600	ic5_3c4	Most used - Painting - Solvent-based painting (automated)	
V601	ic5_4c1	Most used - Plastic injection- Non-visible interior plastic (operators)	
V602	ic5_4c2	Most used - Plastic injection - Plastic exterior body parts (operators)	
V603	ic5_4c3	Most used - Plastic injection- Non-visible interior plastic (robotics)	
V604	ic5_4c4	Most used - Plastic injection - Plastic exterior body parts (robotics)	
V605	ic5_5c1	Most used - Productive asset mgt. - Breakdown maintenance	
V606	ic5_5c2	Most used - Productive asset mgt. - Preventative/predictive maintenance	
V607	ic5_5c3	Most used - Productive asset mgt. - Model Based Condition Monitoring	
V608	ic6_1c1	Most used - Air filtration - Unfiltered air	
V609	ic6_1c2	Most used - Air filtration - Basic	
V610	ic6_1c3	Most used - Air filtration - HEPA	
V611	ic6_1c4	Most used - Air filtration - Ultra HEPA, pressurization control	
V612	ic6_2c1	Most used - Weighting - Beam Scales	
V613	ic6_2c2	Most used - Weighting - Analog Scales	
V614	ic6_2c3	Most used - Weighting - Electronic Scales	
V615	ic6_2c4	Most used - Weighting - Automated Weighing	
V616	ic6_3c1	Most used - Mixing/compounding - Manual	
V617	ic6_3c2	Most used - Mixing/compounding - Planetary Mixers OR homogenizers	
V618	ic6_3c3	Most used - Mixing/compounding - High Speed, High Shear Granulators	
V619	ic6_3c4	Most used - Mixing/compounding - Fluid Bed Processors (not with syrups)	
V620	ic6_3c5	Most used - Mixing/compounding - Fully Automated Compounding	
V621	ic6_4c1	Most used - Compression/encapsulation - Manual	

ID	Name	Label	Question
V622	ic6_4c2	Most used - Compression/encapsulation - Motorized	
V623	ic6_4c3	Most used - Compression/encapsulation - Automated	
V624	ic6_4c4	Most used - Compression/encapsulation - Integrated	
V625	ic6_5c1	Most used - Quality control - Manual, titrimetric/chromatographic	
V626	ic6_5c2	Most used - Quality control - Elec. chromatography	
V627	ic6_5c3	Most used - Quality control - Elec. chromatography w data acquisition	
V628	ic6_6c1	Most used - Packaging - Manual filling pills or syrups	
V629	ic6_6c2	Most used - Packaging - Slat Counters, Cottoners, etc; machine filling	
V630	ic6_6c3	Most used - Packaging - Automated, integrated packaging lines	
V631	ic7_1c1	Most used - Cust. serv. - Store	
V632	ic7_1c2	Most used - Cust. serv. - Phone or Help Desk	
V633	ic7_1c3	Most used - Cust. serv. - Social Media	
V634	ic7_1c4	Most used - Cust. serv. - Online requests	
V635	ic7_1c5	Most used - Cust. serv. - Chatbots	
V636	ic7_2c1	Most used - Pricing - Manual Cost	
V637	ic7_2c2	Most used - Pricing - Automated markup	
V638	ic7_2c3	Most used - Pricing - Automated promotional	
V639	ic7_2c4	Most used - Pricing - Dynamic pricing systems	
V640	ic7_2c5	Most used - Pricing - Personalized pricing (predictive analytics)	
V641	ic7_3c1	Most used - Merchandising - Manually selection	
V642	ic7_3c2	Most used - Merchandising - Category mgt.	
V643	ic7_3c3	Most used - Merchandising - Retail Merch. Systems or Digital Merch.	
V644	ic7_3c4	Most used - Merchandising - Product trend analytics	
V645	ic7_4c1	Most used - Inventory - Handwritten record keeping	
V646	ic7_4c2	Most used - Inventory - Computer databases (manual updates)	
V647	ic7_4c3	Most used - Inventory - WMS (specialised software)	
V648	ic7_4c4	Most used - Inventory - CAO, vendor-managed, and/or radio-frequency identificati	
V649	ic7_4c5	Most used - Inventory - AS/RS	
V650	ic7_5c1	Most used - Ad channels - Paper based communication	
V651	ic7_5c2	Most used - Ad channels - Radio, Billboards, TV	
V652	ic7_5c3	Most used - Ad channels - Email or mobile phone	
V653	ic7_5c4	Most used - Ad channels - Social Media	
V654	ic7_5c5	Most used - Ad channels - Search Engine Marketing	
V655	ic7_5c6	Most used - Ad channels - Big data Analytics or AI	
V656	ic8_1c1	Most used - Cust. serv. - Teller	
V657	ic8_1c2	Most used - Cust. serv. - ATM machines	
V658	ic8_1c3	Most used - Cust. serv. - On-line on company website	
V659	ic8_1c4	Most used - Cust. serv. - Mobile app	
V660	ic8_2c1	Most used - Verification id - Teller	
V661	ic8_2c2	Most used - Verification id - online passwords	
V662	ic8_2c3	Most used - Verification id - online passwords (combined)	
V663	ic8_2c4	Most used - Verification id - Digital auth.	
V664	ic8_2c5	Most used - Verification id - Biometrics	
V665	ic8_2c6	Most used - Verification id - Blockchain	
V666	ic8_3c1	Most used - Loan app - Loan officer (paper-based)	

ID	Name	Label	Question
V667	ic8_3c2	Most used - Loan app - Mobile app + paper	
V668	ic8_3c3	Most used - Loan app - Channel partners	
V669	ic8_4c1	Most used - Credit approvals - Analyst (paper-based)	
V670	ic8_4c2	Most used - Credit approvals - Analyst (digital info)	
V671	ic8_4c3	Most used - Credit approvals - Automated	
V672	ic8_4c4	Most used - Credit approvals - Algorithm (AI or Big-Data)	
V673	ic8_5c1	Most used - Op. supp. - writing records	
V674	ic8_5c2	Most used - Op. supp. - dig. accounting (PCs)	
V675	ic8_5c3	Most used - Op. supp. - dig. network	
V676	ic9_1c1	Most used - Transportation planning - handwritten info.	
V677	ic9_1c2	Most used - Transportation planning - electronic file share	
V678	ic9_1c3	Most used - Transportation planning - installed software	
V679	ic9_1c4	Most used - Transportation planning - real time info. with ERP	
V680	ic9_2c1	Most used - Loading - Manual process (fax, text, phone)	
V681	ic9_2c2	Most used - Loading - Manual process (dig. platforms)	
V682	ic9_2c3	Most used - Loading - web-based	
V683	ic9_2c4	Most used - Loading - specific software interface via Internet	
V684	ic9_2c5	Most used - Loading - file exchange (ERP integrated apps)	
V685	ic9_3c1	Most used - Monitoring load/delivery - Event driven (fax, text, phone calls)	
V686	ic9_3c2	Most used - Monitoring load/delivery - Event driven (digital)	
V687	ic9_3c3	Most used - Monitoring load/delivery - Paper documentation	
V688	ic9_3c4	Most used - Monitoring load/delivery - installed softwares	
V689	ic9_3c5	Most used - Monitoring load/delivery - ERP integrated apps	
V690	ic9_4c1	Most used - Transp. perf. - manually	
V691	ic9_4c2	Most used - Transp. perf. - computer (non-specialized software)	
V692	ic9_4c3	Most used - Transp. perf. - computer (specialised transp. reporting)	
V693	ic9_4c4	Most used - Transp. perf. - installed software	
V694	ic9_4c5	Most used - Transp. perf. - file exchange between ERP integrated	
V695	ic9_5c1	Most used - Fleet management - manual	
V696	ic9_5c2	Most used - Fleet management - electronic file	
V697	ic9_5c3	Most used - Fleet management - ETM	
V698	ic9_5c4	Most used - Fleet management - ERP and software	
V699	ic10_2c1	Most used - Scheduling - Personal visit and paper	
V700	ic10_2c2	Most used - Scheduling - Phone call, SMS, or Email	
V701	ic10_2c3	Most used - Scheduling - Software or app (w/o automated reminders)	
V702	ic10_2c4	Most used - Scheduling - Software or app (w automated reminders)	
V703	ic10_3c1	Most used - Patient records - Handwritten process	
V704	ic10_3c2	Most used - Patient records - Digital patient records	
V705	ic10_3c3	Most used - Patient records - EHR	
V706	ic10_3c4	Most used - Patient records - Cloud-based HER	
V707	ic11_1c1	Most used - Design - Manual	
V708	ic11_1c2	Most used - Design - Digital or semi-digital	
V709	ic11_1c3	Most used - Design - CAD, 3D, or virtual	
V710	ic11_2c1	Most used - Cutting - Manual	
V711	ic11_2c2	Most used - Cutting - Machine manually-operated	

ID	Name	Label	Question
V712	ic11_2c3	Most used - Cutting - Semi-automatic machine	
V713	ic11_2c4	Most used - Cutting - Automatic/Computerised (no Laser)	
V714	ic11_3c1	Most used - Sewing - Manually	
V715	ic11_3c2	Most used - Sewing - Machine (manually)	
V716	ic11_3c3	Most used - Sewing - Machine (semi-automated)	
V717	ic11_3c4	Most used - Sewing - Machine (automated)	
V718	ic11_4c1	Most used - Assembly/Finishing - manual	
V719	ic11_4c2	Most used - Assembly/Finishing - conveyor/assembly (static/semi-automated)	
V720	ic11_4c3	Most used - Assembly/Finishing - conveyor/assembly (dynamic/automated)	
V721	ic11_4c4	Most used - Assembly/Finishing - injection machine	
V722	ic11_4c5	Most used - Assembly/Finishing - 3D printing	
V723	region_id	Region	

Total: 723

Data file: isic_data

ISIC Rev. 4 sector classification data

Cases: 21055

Variables: 4

Variables

ID	Name	Label	Question
V724	firmid		
V725	isic4d		
V726	isic3d		
V727	isic2d		

Total: 4

S1B: Sampling size

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

A7C: Top Manager - Highest Education

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 36 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Primary school
2	Secondary school
3	Complete high-school
4	College degree
5	Post-Graduation (MBA, Master or PhD)
6	

S4: Multi-Establishment

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

S7: Number of workers (screener)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

A3B: Private foreign ownership %

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
10	
12	
14	
15	
17	
20	
21	
22	
23	
25	
26	
27	
28	
30	

31	
33	
34	
35	
37	
38	
39	
40	
41	
42	
43	
45	
47	
48	
49	
50	
51	
53	
55	
57	
58	
60	
61	
63	
65	
66	
67	
68	
70	
71	
72	
73	
74	
75	
76	
77	
78	
80	
82	

83	
84	
85	
86	
87	
88	
90	
92	
93	
94	
95	
96	
97	
98	
99	
100	

A4B: Founder - Ownership

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 16 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	Founder
2	Founder's family
3	No

A5A: Sector - group

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 19 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
1	Agriculture
2	Livestock
3	Food Processing
4	Apparel
5	Motor vehicles
6	Pharmaceuticals
7	Wholesale or retail
8	Financial services
9	Land transport
10	Health services
11	Leather
12	Accommodation
13	Bricks
14	Iron and Steel
15	Cement
101	Other Manufact.
102	Other Services

A6: Year of beginning operations

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

A7A: Top Manager - Experience Same Sector

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know

-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	

39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
62	
63	
64	
65	
66	
67	
70	
72	
74	
78	
83	
88	
94	
100	
111	
123	
153	

230	
254	

A7B: Top Manager - Female

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

A7D: Top Manager - Studied Abroad

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

B1A: Electrical Connection

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

B1B: Power Outages - Year

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

B4A: No. of Desktop or Laptops

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

B5A: Internet connection

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

B7A: Production compared to other firms in country

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

B7B: Production compared to other firms in world

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

B8C: Years using b8a4, b8a5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
42	
43	
45	
46	
49	
50	
52	
57	
60	
71	
100	
2014	

B9C: Years using b9a4, b9a5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	

28	
29	
30	
32	
33	
36	
40	

B10C: Years using b10a4, b10a5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

B11C: Years using b11a4, b11a5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
27	
29	
30	
33	
39	
40	

B12C: Years using b12a3, b12a4, b12a5, b12a6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	

9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
27	
28	
29	
30	
32	
34	
35	
40	
42	
45	
50	
2013	

B13D: Years using b12b4, b13b5, b13b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
34	
35	
37	
38	
40	
41	

42	
45	
50	
53	
57	
63	
80	
1150	
2005	
2013	
2014	
2015	

B14C: Years using b14a5, b14a6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

B15C: Years using b15a4, b15a5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

C1_1D: Years using c1_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	

3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
23	
25	
27	
30	
32	
33	
40	
60	

C1_2D: Years using c1_2b5, c1_2b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
22	
24	
25	
27	
29	
30	
31	
33	
38	
40	

C1_3D: Years using c1_3b6, c1_3b7

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
7	
8	
9	
10	
12	
15	
18	
20	

C1_4D: Years using c1_4b4, c1_4b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	

8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
25	
27	
29	
30	
33	
35	
40	
70	

C1_5D: Years using c1_5b3, c1_5b4, c1_5b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	

6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
30	
32	
35	
40	
41	
54	
60	

C1_6D: Years using c1_6b, c1_6b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-------	----------

-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
20	
21	
24	
25	
30	
32	
35	
40	
45	

C2_1D: Years using c2_1b3, c2_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
15	
17	
18	
20	
21	
22	
24	
25	
28	
30	
38	
56	

C2_2D: Years using c2_2b5, c2_2b6, c2_2b7

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-------	----------

-999999999	missing
-9	Don't know
1	If one year or less than one year
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
25	
27	
28	
30	
34	
38	
40	
56	

C2_3D: Years using c2_3b3, c2_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
25	
26	
27	
28	
30	
37	
38	
39	
40	
56	

C2_4D: Years using c2_4b5, c2_4b6, c2_4b7

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
3	
4	
5	
7	
10	
15	
20	
21	
24	
28	
30	

C2_5D: Years using c2_5b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
4	
5	

6	
7	
8	
9	
10	
12	
13	
15	
16	
17	
20	
21	
23	
28	
30	

C3_1D: Years using c3_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

12	
13	
14	
15	
16	
18	
19	
20	
23	
25	
30	
32	
35	
40	
50	
63	
73	

C3_2D: Years using c3_2b3, c3_2b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	

10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
36	
37	
40	
42	
50	
53	
55	
60	
63	
73	
99	

C3_3D: Years using c3_3b3, c3_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

32	
33	
35	
39	
40	
42	
50	
53	
55	
58	
60	
66	
73	

C3_4D: Years using c3_4b3, c_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
33	
35	
36	
40	
42	
50	
53	
55	
63	
73	

C3_5D: Years using c3_5b3, c3_5b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know

-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
35	
36	
39	
40	
42	

43	
44	
50	
53	
55	
58	
60	
63	
66	
73	
76	
87	

C4_1D: Years using c4_1b2, c4_1b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15	
16	
17	
18	
19	
20	
21	
22	
23	
25	
30	
35	

C4_2D: Years using c4_2b4, c4_2b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

15	
16	
17	
19	
20	
21	
22	
23	
25	
30	
35	

C4_3D: Years using c4_3b3, c4_3b4, c4_3b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
27	
28	
30	
31	
32	
35	
37	
40	
50	
800	

C4_4D: Years using c4_4b3, c4_4b4, c4_4b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	

7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
19	
20	
21	
22	
23	
25	
26	
30	
35	

C5_1D: Years using c5_1b4, c5_1b5, c5_1b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
8	

9	
10	
11	
12	
13	
15	
16	
18	
19	
20	
24	
25	

C5_2D: Years using c5_2b4, c5_2b5 ,c5_2b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
2	
3	
4	
5	
7	
9	
10	
11	
12	
15	
17	
20	
25	
34	

C5_3D: Years using c5_3b3, c5_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
3	
5	
10	
12	
13	
14	
15	
17	
20	
25	
34	

C5_4D: Years using c5_4b3, c5_4b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
4	

5	
6	
7	
8	
10	
12	
14	
15	
18	
24	
25	
34	
1999	

C5_5D: Years using c5_5b2, c5_5b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	
16	
17	
18	
19	
20	
24	
25	
28	
30	
34	
40	

C6_1D: Years using c6_1b3, c6_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

14	
15	
16	
18	
19	
20	
21	
22	
23	
24	
25	
30	
31	
34	
39	

C6_2D: Years using c6_2b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

12	
13	
15	
16	
17	
18	
19	
20	
22	
23	
24	
25	
27	
28	
30	
34	
35	

C6_3D: Years using c6_3b3, c6_3b4, c6_3b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	

10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
27	
30	
34	
35	
39	

C6_4D: Years using c6_4b3, c6_4b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	

6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
23	
24	
25	
27	
30	
35	

C6_5D: Years using c6_5b2, c6_5b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	

5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
17	
18	
19	
20	
21	
22	
24	
25	
27	
30	
32	
34	
35	
37	
39	

C6_6D: Years using c6_6b2, c6_6b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
29	
30	
34	
35	
37	
39	

C7_1D: Years using c7_1b3, c7_1b4, c7_1b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
25	
27	
28	
29	
30	
31	
32	
34	
37	
53	
57	

67

C7_2D: Years using c7_2b4, c7_2b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

28	
29	
30	
33	

C7_3D: Years using c7_3b3, c7_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
23	

24	
25	
27	
28	
29	
30	
53	
67	

C7_4D: Years using c7_4b4, c7_4b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

19	
20	
21	
22	
23	
24	
25	
28	
30	

C7_5D: Years using c7_5b5, c7_5b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

18	
20	
24	
25	
27	
30	
34	
53	
67	

C8_1D: Years using c8_1b3, c8_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

18	
20	
21	
22	
25	
28	
29	
30	
34	
36	
38	
40	
46	
50	
52	
60	

C8_2D: Years using c8_2b4, c8_2b5, c8_2b6

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

11	
12	
13	
14	
15	
17	
18	
20	
21	
24	
25	
29	
30	
34	
36	
40	
43	
46	
60	

C8_3D: Years using c8_3b2, c8_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	

8	
9	
10	
11	
12	
13	
15	
17	
18	
20	
21	
25	
27	
30	
34	
36	
38	
40	
42	
46	
49	
51	
52	
57	
60	

C8_4D: Years using c8_4b3, c8_4b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	

2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
17	
18	
19	
20	
21	
25	
30	
38	
40	
43	
46	
52	
60	

C8_5D: Years using c8_5b2, c8_5b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know

-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
25	
26	
27	
29	
30	
34	
35	
38	
40	
46	
50	
52	
60	

C9_1D: Years using c9_1b3, c9_1b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
18	
20	
21	
22	
25	
26	
31	

C9_2D: Years using c9_2b3, c9_2b4, c9_2b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
18	
20	
22	
24	
25	
26	
29	
31	

C9_3D: Years using c9_3b3, c9_3b4, c9_3b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
18	
20	
22	
24	
25	
26	
29	
31	

C9_4D: Years using c9_4b3, c9_4b4, c9_4b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
20	
22	
24	
25	
26	
29	
31	
39	

C9_5D: Years using c9_5b3, c9_5b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
18	
20	
22	
25	
29	
31	

C10_2D: Years using c10_2b3, c10_2b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-------	----------

-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
29	
30	

C10_3D: Years using c10_3b3, c10_3b4

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
20	
21	
22	
24	
25	
27	
29	
30	
35	
37	
40	

C10_4D: Years using c10_4c2

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
22	
27	
30	
35	
37	
53	

C11_1D: Years using c11_1b2, c11_1b3

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

C11_2D: Years using c11_2b4, c11_2b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

C11_3D: Years using c11_3b3, c11_3b4, c11_cb5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

C11_4D: Years using c11_4b3, c11_4b4, c11_4b5

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

D1A: Purchase/Lease - Equip. or Mach.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 31 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes, new
2	Yes, second hand
3	Yes, both (new and second hand)
4	No

D1B: Purchase or Lease - Software License

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

D1C: Dev., Custom. or Modif. of Machine or Software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

D3A: Loan - mach., equip or licensing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

D3C: No. - needed to borrow but not get it

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

D4A: Formal Incentives - Money, gift, or recognition

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

D4B: No. KPIs monitored

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 37 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	1-2 key performance indicators
2	3-9 key performance indicators
3	10 or more key performance indicators
4	No key performance indicators

D4C: Frequency monitoring the KPIs

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 25 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yearly
2	Quarterly
3	Monthly
4	Weekly
5	Daily
6	Hourly or more frequently
7	Never

D4D: Time frame - production targets

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 42 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Short-term (< 1 yr) prod. targets
2	Long-term (>=1 yr) prod. targets
3	Comb. of short and long-term prod. targets
4	No prod. targets

D6A: Did export?

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 30 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Exported directly
2	Exported through trading firms

3 Did not export

D6B: Direct Exports (% of sales)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

D6C: Imported inputs, machines or equipment?

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
1	Yes
2	No

E7C: Total energy cost (ref_year1)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

E1A: No. of permanent workers, full-time (ref_year1)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

E1B: No. of permanent workers, part-time (ref_year1)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

E1C: No. of temporary or seasonal workers, full-time (ref_year1)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

25	
26	
27	
29	
30	
31	
33	
34	
35	
40	
42	
45	
46	
50	
52	
55	
56	
57	
58	
60	
64	
70	
72	
75	
80	
90	
92	
93	
98	
100	
101	
110	
115	
120	
140	
144	
150	
160	
176	

180	
200	
221	
250	
275	
277	
290	
300	
356	
400	
405	
460	
500	
550	
579	
700	
1000	
1155	
1401	
1500	
1800	
1830	
2808	

E1D: No. of temporary or seasonal workers, part-time (ref_year1)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	

4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
19	
20	
21	
23	
25	
30	
31	
35	
39	
40	
50	
59	
60	
62	
70	
72	
75	
80	
94	
100	
121	
150	
200	
245	
275	

420	
500	

E5C: % of workers - vocational training

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

Questions and instructions

CATEGORIES

Value	Category
-9	Don't know
-7	Not applicable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	

25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	

64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
75	
76	
77	
78	
80	
82	
84	
85	
86	
87	
88	
90	
91	
92	
94	
95	
96	
97	
98	
99	
100	

E5D: % of workers - completed college degree or more

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

E6A: Total sales (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E7A: Total labor cost (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E7B: Total material cost (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E7D: Operation cost (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E8A: Equipment cost (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E8B: Building cost (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 14 Range: - Format: Numeric

E10A: Main product - % share in total sales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

E10B: Main product - average markup

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 14 Range: - Format: Numeric

COUNTRY: Country

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 17 Range: - Format: character

FIRMID:

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

S1C_REV: Sampling location

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

FORMALITY: Formal Sector

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

BASE_WT: Sampling Weight

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

E1: Total no. workers by end of (ref_year1)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 10 Range: - Format: Numeric

DB8A1: Adopted - Business Administration - Handwritten Processes

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB8A2: Adopted - Business Administration - Computers (standard softwares)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB8A3: Adopted - Business Administration - Mobile Apps or Digital Platform

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB8A4: Adopted - Business Administration - Computers (specialised softwares)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB8A5: Adopted - Business Administration - ERP

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB9A1: Adopted - Production Planning - Handwritten processes

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB9A2: Adopted - Production Planning - Computers (standard softwares)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB9A3: Adopted - Production Planning - Mobile Apps or digital platforms

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB9A4: Adopted - Production Planning - Specialized software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB9A5: Adopted - Production Planning - ERP

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB10A1: Adopted - Suppliers - manual search

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB10A2: Adopted - Suppliers - management of supply chain info

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB10A3: Adopted - Suppliers - online social media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB10A4: Adopted - Suppliers - SRM (not integrated w prod planning)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB10A5: Adopted - Suppliers - SRM (integrated w prod planning)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB11A1: Adopted - Marketing - Face to Face Chat

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB11A2: Adopted - Marketing - Online Chat

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB11A3: Adopted - Marketing - Structured Surveys

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB11A4: Adopted - Marketing - CRM

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB11A5: Adopted - Marketing - Big Data Analytics

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A1: Adopted - Fabrication - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A2: Adopted - Fabrication - Machines w/o computer

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A3: Adopted - Fabrication - Computer

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A4: Adopted - Fabrication - Robots

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A5: Adopted - Fabrication - Additive manufacturing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB12A6: Adopted - Fabrication - Other Adv. Processes

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B1: Adopted - Sales - Establishment Premises

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B2: Adopted - Sales - Phone, email or sales representatives

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B3: Adopted - Sales - Social media platforms/apps

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B4: Adopted - Sales - Online Sales (ext. dig. platforms)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B5: Adopted - Sales - Online Sales (own website)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB13B6: Adopted - Sales - Electronic orders

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A1: Adopted - Payment - goods exchange

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A2: Adopted - Payment - cash

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A3: Adopted - Payment - Cheque, voucher, bank wire

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A4: Adopted - Payment - Cards

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A5: Adopted - Payment - Online/electronic

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DB14A6: Adopted - Payment - Online (platforms)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB14A7: Adopted - Payment - Cryptocurrency

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB15A1: Adopted - Quality Control - Manual, Visual or Written

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB15A2: Adopted - Quality Control - Human Inspection

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB15A3: Adopted - Quality Control - Statistical Control

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DB15A4: Adopted - Quality Control - Automated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_0A1: Adopted - Crops: Info. sources - Radio

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A2: Adopted - Crops: Info. sources - TV

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A3: Adopted - Crops: Info. sources - Non-internet mobile

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A4: Adopted - Crops: Info. sources - Mobile internet tech

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A5: Adopted - Crops: Info. sources - Meet other producers

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A6: Adopted - Crops: Info. sources - Pub. or Pvt. agent visit

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_0A7: Adopted - Crops: Info. sources - Precision agriculture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_1B1: Adopted - Land prep - Manual plowing (simple tools)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_1B2: Adopted - Land prep - Animal Aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_1B3: Adopted - Land prep - Manually operated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_1B4: Adopted - Land prep - Digitally operated tractors or equipment

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_2B1: Adopted - Irrig.- Rain-fed, no additional irrig.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_2B2: Adopted - Irrig. - Manual irrig.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_2B3: Adopted - Irrig. - Surface Flood Irrig.

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_2B4: Adopted - Irrig. - Small Pump

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_2B5: Adopted - Irrig. - Drip, localized, underground, Sprinkler, centre pivot

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_2B6: Adopted - Irrig. - Automated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_3B1: Adopted - Weeding/pest control - Manual application

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_3B2: Adopted - Weeding/pest control - Mechanical application

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC1_3B3: Adopted - Weeding/pest control - Biological methods

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_3B4: Adopted - Weeding/pest control - Precision agriculture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_3B5: Adopted - Weeding/pest control - Advanced precision agriculture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_4B1: Adopted - Harvesting, training, or pruning - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_4B2: Adopted - Harvesting, training, or pruning - Animal Aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_4B3: Adopted - Harvesting, training, or pruning - Human-operated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_4B4: Adopted - Harvesting, training, or pruning - Manually mechanised

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_4B5: Adopted - Harvesting, training, or pruning - Digitally automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_5B1: Adopted - Storage facility - Precarious

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_5B2: Adopted - Storage facility - Protected (w/o temp. control)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_5B3: Adopted - Storage facility - Special Storage (temp. control)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_5B4: Adopted - Storage facility - High-end central storage

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_5B5: Adopted - Storage facility - Cont. temp. monitoring

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_6B1: Adopted - Packing - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_6B2: Adopted - Packing - Human-operated mech. equip.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_6B3: Adopted - Packing - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC1_6B4: Adopted - Packing - Modified atmosphere

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A1: Adopted - Livestock: Info sources - Radio

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A2: Adopted - Livestock: Info sources - TV

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A3: Adopted - Livestock: Info sources - Non-internet mobile

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A4: Adopted - Livestock: Info sources - Mobile internet tech

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A5: Adopted - Livestock: Info sources - Meet other producers

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A6: Adopted - Livestock: Info sources - Pub or pvt agen visits

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_0A7: Adopted - Livestock: Info sources - Precision agri tools

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_1B1: Adopted - Breeding/genetic - Breed substitution

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_1B2: Adopted - Breeding/genetic - Inbreeding or Crossbreeding

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_1B3: Adopted - Breeding/genetic - Artificial insemination (AI)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_1B4: Adopted - Breeding/genetic - Selective breeding

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_2B1: Adopted - Animal nutrition - Household waste or fibrous crop residues

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_2B2: Adopted - Animal nutrition - Natural grasslands and pastures

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_2B3: Adopted - Animal nutrition - Integrated crop-livestock systems

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_2B4: Adopted - Animal nutrition - Production of forage crops

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_2B5: Adopted - Animal nutrition - Production of supplementary feed

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_2B6: Adopted - Animal nutrition - Manu. or mixing of feed

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_2B7: Adopted - Animal nutrition - Prod. of genetically-modified feed

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_3B1: Adopted - Animal healthcare - Rapid diagnostic tests

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_3B2: Adopted - Animal healthcare - Pest sprays

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_3B3: Adopted - Animal healthcare - Vaccines

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_3B4: Adopted - Animal healthcare - DNA or RNA vaccine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_3B5: Adopted - Animal healthcare - Disease med.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_4B1: Adopted - Herd mgt/monitoring - Human

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_4B2: Adopted - Herd mgt/monitoring - Animal-aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_4B3: Adopted - Herd mgt/monitoring - Feedlots or grazing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_4B4: Adopted - Herd mgt/monitoring - Automated cameras/video

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC2_4B5: Adopted - Herd mgt/monitoring - Unmanned aerial

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_4B6: Adopted - Herd mgt/monitoring - Analog tracking

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_4B7: Adopted - Herd mgt/monitoring - Digital tracking

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_5B1: Adopted - Transp. livestock - Manual

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_5B2: Adopted - Transp. livestock - Non-motorized vehicles

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_5B3: Adopted - Transp. livestock - Motorized vehicles

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC2_5B4: Adopted - Transp. livestock - Specialized/climate-controlled vehicles

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_1B1: Adopted - Input testing - Sensory

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_1B2: Adopted - Input testing - Review of supplier testing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_1B3: Adopted - Input testing - Non-computer-controlled

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_1B4: Adopted - Input testing - Computer testing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_2B1: Adopted - Food prep. - Manual

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_2B2: Adopted - Food prep. - Mech. equipment (human force)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC3_2B3: Adopted - Food prep. - Power equipment (human interaction)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_2B4: Adopted - Food prep. - Power equipment (computers or robotics, minimal int.)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_3B1: Adopted - Anti-bacterial - Minimal-processing preservation

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_3B2: Adopted - Anti-bacterial - Anti-bacterial wash or soaking

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_3B3: Adopted - Anti-bacterial - Thermal Processing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_3B4: Adopted - Anti-bacterial - Other adv. methods

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_4B1: Adopted - Food pkg. - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_4B2: Adopted - Food pkg. - Human-operated mech. equip.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_4B3: Adopted - Food pkg. - Power equip. (human interaction)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_4B4: Adopted - Food pkg. - Power equip. (comp./robotics, min. human int.)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_5B1: Adopted - Food storage - Minimal protection (some exposure)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_5B2: Adopted - Food storage - Ambient conditions (closed building)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_5B3: Adopted - Food storage - Some climate control (secured building)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC3_5B4: Adopted - Food storage - Automated climate (security-controlled building)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_1B1: Adopted - Design drawing - Manual/hand-draw

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_1B2: Adopted - Design drawing - Digital/semi-digital design

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_1B3: Adopted - Design drawing - CAD

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_2B1: Adopted - Cutting - Manual cutting

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_2B2: Adopted - Cutting - Cutting machine (manually operated)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_2B3: Adopted - Cutting - Semi-Automatic cutting machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_2B4: Adopted - Cutting - Automatic/Computerized cutting machine (no Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_2B5: Adopted - Cutting - Automatic/Computerized cutting machine (Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_3B1: Adopted - Sewing - Manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_3B2: Adopted - Sewing - Machine (manually operated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_3B3: Adopted - Sewing - Semi-automated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC4_3B4: Adopted - Sewing - Automated machines

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_3B5: Adopted - Sewing - 3D Knitting

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_4B1: Adopted - Finishing/ironing - Basic manual ironing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_4B2: Adopted - Finishing/ironing - Electric high-pressure steam iron

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_4B3: Adopted - Finishing/ironing - Tunnel finisher

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_4B4: Adopted - Finishing/ironing - Form finishing machine

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC4_4B5: Adopted - Finishing/ironing - High tech pressing machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_1B1: Adopted - Assembly/fabrication - Machines (controlled by operators)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_1B2: Adopted - Assembly/fabrication - FMC or FMS

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_1B3: Adopted - Assembly/fabrication - Lasers (materials processing)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_1B4: Adopted - Assembly/fabrication - CNC machinery

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_1B5: Adopted - Assembly/fabrication - Robots

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_1B6: Adopted - Assembly/fabrication - Additive manufacturing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC5_2B1: Adopted - Body press/welding - Pressing of skin panels (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_2B2: Adopted - Body press/welding - Pressing of structural components (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_2B3: Adopted - Body press/welding - Welding of main body (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_2B4: Adopted - Body press/welding - Pressing of skin panels (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_2B5: Adopted - Body press/welding - Pressing of structural components (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_2B6: Adopted - Body press/welding - Welding of main body (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_3B1: Adopted - Painting - Water-based painting (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_3B2: Adopted - Painting - Solvent-based painting (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_3B3: Adopted - Painting - Water-based painting (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_3B4: Adopted - Painting - Solvent-based painting (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_4B1: Adopted - Plastic injection- Non-visible interior plastic (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_4B2: Adopted - Plastic injection - Plastic exterior body parts (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_4B3: Adopted - Plastic injection- Non-visible interior plastic (robotics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_4B4: Adopted - Plastic injection - Plastic exterior body parts (robotics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_5B1: Adopted - Productive asset mgt. - Breakdown maintenance

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_5B2: Adopted - Productive asset mgt. - Preventative/predictive maintenance

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC5_5B3: Adopted - Productive asset mgt. - Model Based Condition Monitoring

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_1B1: Adopted - Air filtration - Unfiltered air

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_1B2: Adopted - Air filtration - Basic

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_1B3: Adopted - Air filtration - HEPA

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_1B4: Adopted - Air filtration - Ultra HEPA, pressurization control

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_2B1: Adopted - Weighting - Beam Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_2B2: Adopted - Weighting - Analog Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_2B3: Adopted - Weighting - Electronic Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_2B4: Adopted - Weighting - Automated Weighing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_3B1: Adopted - Mixing/compounding - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_3B2: Adopted - Mixing/compounding - Planetary Mixers OR homogenizers

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_3B3: Adopted - Mixing/compounding - High Speed, High Shear Granulators

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_3B4: Adopted - Mixing/compounding - Fluid Bed Processors (not with syrups)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_3B5: Adopted - Mixing/compounding - Fully Automated Compounding

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_4B1: Adopted - Compression/encapsulation - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_4B2: Adopted - Compression/encapsulation - Motorized

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_4B3: Adopted - Compression/encapsulation - Automated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_4B4: Adopted - Compression/encapsulation - Integrated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_5B1: Adopted - Quality control - Manual, titrimetric/chromatographic

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_5B2: Adopted - Quality control - Elec. chromatography

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_5B3: Adopted - Quality control - Elec. chromatography w data acquisition

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_6B1: Adopted - Packaging - Manual filling pills or syrups

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC6_6B2: Adopted - Packaging - Slat Counters, Cottoners, etc; machine filling

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC6_6B3: Adopted - Packaging - Automated, integrated packaging lines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_1B1: Adopted - Cust. serv. - Store

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_1B2: Adopted - Cust. serv. - Phone or Help Desk

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_1B3: Adopted - Cust. serv. - Social Media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_1B4: Adopted - Cust. serv. - Online requests

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_1B5: Adopted - Cust. serv. - Chatbots

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_2B1: Adopted - Pricing - Manual Cost

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_2B2: Adopted - Pricing - Automated markup

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_2B3: Adopted - Pricing - Automated promotional

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_2B4: Adopted - Pricing - Dynamic pricing systems

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_2B5: Adopted - Pricing - Personalized pricing (predictive analytics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_3B1: Adopted - Merchandising - Manually selection

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_3B2: Adopted - Merchandising - Category mgt.

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_3B3: Adopted - Merchandising - Retail Merch. Systems or Digital Merch.

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_3B4: Adopted - Merchandising - Product trend analytics

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_4B1: Adopted - Inventory - Handwritten record keeping

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_4B2: Adopted - Inventory - Computer databases (manual updates)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_4B3: Adopted - Inventory - WMS (specialised software)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC7_4B4: Adopted - Inventory - CAO, vendor-managed, and/or radio-frequency identification

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_4B5: Adopted - Inventory - AS/RS

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B1: Adopted - Ad channels - Paper based communication

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B2: Adopted - Ad channels - Radio, Billboards, TV

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B3: Adopted - Ad channels - Email or mobile phone

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B4: Adopted - Ad channels - Social Media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B5: Adopted - Ad channels - Search Engine Marketing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC7_5B6: Adopted - Ad channels - Big data Analytics or AI

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_1B1: Adopted - Cust. serv. - Teller

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_1B2: Adopted - Cust. serv. - ATM machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_1B3: Adopted - Cust. serv. - On-line on company website

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_1B4: Adopted - Cust. serv. - Mobile app

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B1: Adopted - Verification id - Teller

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B2: Adopted - Verification id - online passwords

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B3: Adopted - Verification id - online passwords (combined)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B4: Adopted - Verification id - Digital auth.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B5: Adopted - Verification id - Biometrics

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_2B6: Adopted - Verification id - Blockchain

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_3B1: Adopted - Loan app - Loan officer (paper-based)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_3B2: Adopted - Loan app - Mobile app + paper

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_3B3: Adopted - Loan app - Channel partners

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_4B1: Adopted - Credit approvals - Analyst (paper-based)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_4B2: Adopted - Credit approvals - Analyst (digital info)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_4B3: Adopted - Credit approvals - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_4B4: Adopted - Credit approvals - Algorithm (AI or Big-Data)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_5B1: Adopted - Op. supp. - writing records

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_5B2: Adopted - Op. supp. - dig. accounting (PCs)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC8_5B3: Adopted - Op. supp. - dig. network

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_1B1: Adopted - Transportation planning - handwritten info.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_1B2: Adopted - Transportation planning - electronic file share

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_1B3: Adopted - Transportation planning - installed software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_1B4: Adopted - Transportation planning - real time info. with ERP

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_2B1: Adopted - Loading - Manual process (fax, text, phone)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_2B2: Adopted - Loading - Manual process (dig. platforms)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_2B3: Adopted - Loading - web-based**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_2B4: Adopted - Loading - specific software interface via Internet**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_2B5: Adopted - Loading - file exchange (ERP integrated apps)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_3B1: Adopted - Monitoring load/delivery - Event driven (fax, text, phone calls)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 9 Range: - Format: Numeric

DC9_3B2: Adopted - Monitoring load/delivery - Event driven (digital)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_3B3: Adopted - Monitoring load/delivery - Paper documentation

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_3B4: Adopted - Monitoring load/delivery - installed softwares

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_3B5: Adopted - Monitoring load/delivery - ERP integrated apps

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_4B1: Adopted - Transp. perf. - manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_4B2: Adopted - Transp. perf. - computer (non-specialized software)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_4B3: Adopted - Transp. perf. - computer (specialised transp. reporting)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_4B4: Adopted - Transp. perf. - installed software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_4B5: Adopted - Transp. perf. - file exchange between ERP integrated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_5B1: Adopted - Fleet management - manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_5B2: Adopted - Fleet management - electronic file

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_5B3: Adopted - Fleet management - ETM

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC9_5B4: Adopted - Fleet management - ERP and software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A1: Adopted - Hosp. facilities - ER

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A2: Adopted - Hosp. facilities - Postoperative care area

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A3: Adopted - Hosp. facilities - ICU

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A4: Adopted - Hosp. facilities - Blood Bank

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A5: Adopted - Hosp. facilities - Testing labs

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A6: Adopted - Hosp. facilities - X-ray

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A7: Adopted - Hosp. facilities - ultrasound machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A8: Adopted - Hosp. facilities - CT scan

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A9: Adopted - Hosp. facilities - MRI machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A11: Adopted - Hosp. facilities - Pulse oximetry

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_1A10: Adopted - Hosp. facilities - ultrasound machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_2B1: Adopted - Scheduling - Personal visit and paper

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_2B2: Adopted - Scheduling - Phone call, SMS, or Email

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_2B3: Adopted - Scheduling - Software or app (w/o automated reminders)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_2B4: Adopted - Scheduling - Software or app (w automated reminders)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_3B1: Adopted - Patient records - Handwritten process

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_3B2: Adopted - Patient records - Digital patient records

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_3B3: Adopted - Patient records - EHR

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_3B4: Adopted - Patient records - Cloud-based HER

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_4C1: Adopted - Med. mgt./admin. - Handwritten

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_4C2: Adopted - Med. mgt./admin. - Barcode/electronic id

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_5A1: Always available- Sepsis treat. - antibiotics

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_5A2: Always available- Sepsis treat. - adv. therapies

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_5A3: Always available- Childbirth - C-section

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_5A4: Always available- Childbirth - High-risk labor

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC10_5A5: Always available- Trauma - Traction (closed fracture)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_5A6: Always available- Trauma - Open Treatment of Fracture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_5A7: Always available- Myocardial infarction/-strokes - defibrillation

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC10_5A8: Always available- Myocardial infarction/-strokes - angiography

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_1B1: Adopted - Design - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_1B2: Adopted - Design - Digital or semi-digital

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_1B3: Adopted - Design - CAD, 3D, or virtual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_2B1: Adopted - Cutting - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_2B2: Adopted - Cutting - Machine manually-operated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_2B3: Adopted - Cutting - Semi-automatic machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_2B4: Adopted - Cutting - Automatic/Computerised (no Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_2B5: Adopted - Cutting - Automatic/Computerised (Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_3B1: Adopted - Sewing - Manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_3B2: Adopted - Sewing - Machine (manually)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_3B3: Adopted - Sewing - Machine (semi-automated)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_3B4: Adopted - Sewing - Machine (automated)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_3B5: Adopted - Sewing - 3D Knitting

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_4B1: Adopted - Assembly/Finishing - manual

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_4B2: Adopted - Assembly/Finishing - conveyor/assembly (static/semi-automated)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC11_4B3: Adopted - Assembly/Finishing - conveyor/assembly (dynamic/automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_4B4: Adopted - Assembly/Finishing - injection machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC11_4B5: Adopted - Assembly/Finishing - 3D printing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_1B1: Adopted - Reservations - handwritten

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_1B2: Adopted - Reservations - digital (std software)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_1B3: Adopted - Reservations - dedicated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_1B4: Adopted - Reservations - PMS

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_1B5: Adopted - Reservations - cloud-based

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_2B1: Adopted - Accom Pricing - manual cost

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_2B2: Adopted - Accom Pricing - automated markup

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_2B3: Adopted - Accom Pricing - automated promotional

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_2B4: Adopted - Accom Pricing - dynamic pricing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_2B5: Adopted - Accom Pricing - personalised pricing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_3B1: Adopted - Housekeeping - handwritten

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_3B2: Adopted - Housekeeping - digital (std. software)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_3B3: Adopted - Housekeeping - dedicated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_3B4: Adopted - Housekeeping - PMS

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_3B5: Adopted - Housekeeping - cloud-based

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_4B1: Adopted - Laundry - manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_4B2: Adopted - Laundry - domestic

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_4B3: Adopted - Laundry - industrial (w automatic sheet fold)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_4B4: Adopted - Laundry - industrial (w/o automatic sheet fold)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_5B1: Adopted - PoS - handwritten

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_5B2: Adopted - PoS - digital records

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_5B3: Adopted - PoS - specialised software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

DC12_5B4: Adopted - PoS - PMS

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

DC12_5B5: Adopted - PoS - cloud-based

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 9 Range: - Format: Numeric

IB8B1: Most used - Business Administration - Handwritten Processes

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IB8B2: Most used - Business Administration - Computers (standard softwares)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IB8B3: Most used - Business Administration - Mobile Apps or Digital Platform

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IB8B4: Most used - Business Administration - Computers (specialised softwares)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IB8B5: Most used - Business Administration - ERP

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB9B1: Most used - Production Planning - Handwritten processes

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB9B2: Most used - Production Planning - Computers (standard softwares)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB9B3: Most used - Production Planning - Mobile Apps or digital platforms

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB9B4: Most used - Production Planning - Specialized software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB9B5: Most used - Production Planning - ERP

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB10A1: Most used - Suppliers - manual search

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB10A2: Most used - Suppliers - management of supply chain info

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB10A3: Most used - Suppliers - online social media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB10A4: Most used - Suppliers - SRM (not integrated w prod planning)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB10A5: Most used - Suppliers - SRM (integrated w prod planning)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB11B1: Most used - Marketing - Face to Face Chat

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB11B2: Most used - Marketing - Online Chat

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB11B3: Most used - Marketing - Structured Surveys

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB11B4: Most used - Marketing - CRM

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB11B5: Most used - Marketing - Big Data Analytics

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C1: Most used - Sales - Establishment Premises

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C2: Most used - Sales - Phone, email or sales representatives

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C3: Most used - Sales - Social media platforms/apps

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C4: Most used - Sales - Online Sales (ext. dig. platforms)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C5: Most used - Sales - Online Sales (own website)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB13C6: Most used - Sales - Electronic orders

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B1: Most used - Payment - goods exchange

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B2: Most used - Payment - cash

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B3: Most used - Payment - Cheque, voucher, bank wire

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B4: Most used - Payment - Cards

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B5: Most used - Payment - Online/electronic

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B6: Most used - Payment - Online (platforms)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB14B7: Most used - Payment - Cryptocurrency

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB15B1: Most used - Quality Control - Manual, Visual or Written

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB15B2: Most used - Quality Control - Human Inspection

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB15B3: Most used - Quality Control - Statistical Control

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB15B4: Most used - Quality Control - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B1: Most used - Fabrication - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B2: Most used - Fabrication - Machines w/o computer

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B3: Most used - Fabrication - Computer

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B4: Most used - Fabrication - Robots

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B5: Most used - Fabrication - Additive manufacturing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IB12B6: Most used - Fabrication - Other Adv. Processes

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_1C1: Most used - Land prep - Manual plowing (simple tools)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_1C2: Most used - Land prep - Animal Aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_1C3: Most used - Land prep - Manually operated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_1C4: Most used - Land prep - Digitally operated tractors or equipment

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C1: Most used - Irrig.- Rain-fed, no additional irrig.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C2: Most used - Irrig. - Manual irrig.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C3: Most used - Irrig. - Surface Flood Irrig.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C4: Most used - Irrig. - Small Pump

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C5: Most used - Irrig. - Drip, localized, underground, Sprinkler, centre pivot

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_2C6: Most used - Irrig. - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_3C1: Most used - Weeding/pest control - Manual application

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_3C2: Most used - Weeding/pest control - Mechanical application

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_3C3: Most used - Weeding/pest control - Biological methods

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_3C4: Most used - Weeding/pest control - Precision agriculture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_3C5: Most used - Weeding/pest control - Advanced precision agriculture

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_4C1: Most used - Harvesting, training, or pruning - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_4C2: Most used - Harvesting, training, or pruning - Animal Aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_4C3: Most used - Harvesting, training, or pruning - Human-operated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_4C4: Most used - Harvesting, training, or pruning - Manually mechanised

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC1_4C5: Most used - Harvesting, training, or pruning - Digitally automated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_5C1: Most used - Storage facility - Precarious

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_5C2: Most used - Storage facility - Protected (w/o temp. control)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_5C3: Most used - Storage facility - Special Storage (temp. control)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_5C4: Most used - Storage facility - High-end central storage

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_5C5: Most used - Storage facility - Cont. temp. monitoring

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_6C1: Most used - Packing - Manual

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_6C2: Most used - Packing - Human-operated mech. equip.

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_6C3: Most used - Packing - Automated

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC1_6C4: Most used - Packing - Modified atmosphere

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC2_1C1: Most used - Breeding/genetic - Breed substitution

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC2_1C2: Most used - Breeding/genetic - Inbreeding or Crossbreeding

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC2_1C3: Most used - Breeding/genetic - Artificial insemination (AI)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_1C4: Most used - Breeding/genetic - Selective breeding

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C1: Most used - Animal nutrition - Household waste or fibrous crop residues

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C2: Most used - Animal nutrition - Natural grasslands and pastures

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C3: Most used - Animal nutrition - Integrated crop-livestock systems

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C4: Most used - Animal nutrition - Production of forage crops

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C5: Most used - Animal nutrition - Production of supplementary feed

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C6: Most used - Animal nutrition - Manu. or mixing of feed**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_2C7: Most used - Animal nutrition - Prod. of genetically-modified feed**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_3C1: Most used - Animal healthcare - Rapid diagnostic tests**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_3C2: Most used - Animal healthcare - Pest sprays**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_3C3: Most used - Animal healthcare - Vaccines**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_3C4: Most used - Animal healthcare - DNA or RNA vaccine**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC2_3C5: Most used - Animal healthcare - Disease med.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C1: Most used - Herd mgt/monitoring - Human

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C2: Most used - Herd mgt/monitoring - Animal-aided

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C3: Most used - Herd mgt/monitoring - Feedlots or grazing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C4: Most used - Herd mgt/monitoring - Automated cameras/video

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C5: Most used - Herd mgt/monitoring - Unmanned aerial

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C6: Most used - Herd mgt/monitoring - Analog tracking

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_4C7: Most used - Herd mgt/monitoring - Digital tracking

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_5C1: Most used - Transp. livestock - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_5C2: Most used - Transp. livestock - Non-motorized vehicles

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_5C3: Most used - Transp. livestock - Motorized vehicles

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC2_5C4: Most used - Transp. livestock - Specialized/climate-controlled vehicles

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_1C1: Most used - Input testing - Sensory

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_1C2: Most used - Input testing - Review of supplier testing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_1C3: Most used - Input testing - Non-computer-controlled

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_1C4: Most used - Input testing - Computer testing

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_2C1: Most used - Food prep. - Manual

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_2C2: Most used - Food prep. - Mech. equipment (human force)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_2C3: Most used - Food prep. - Power equipment (human interaction)

Data file: fat0_raw_data_qje

OverviewType: Discrete Width: 8 Range: - Format: Numeric

IC3_2C4: Most used - Food prep. - Power equipment (computers or robotics, minimal int.)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_3C1: Most used - Anti-bacterial - Minimal-processing preservation

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_3C2: Most used - Anti-bacterial - Anti-bacterial wash or soaking

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_3C3: Most used - Anti-bacterial - Thermal Processing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_3C4: Most used - Anti-bacterial - Other adv. methods

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_4C1: Most used - Food pkg. - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_4C2: Most used - Food pkg. - Human-operated mech. equip.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_4C3: Most used - Food pkg. - Power equip. (human interaction)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_4C4: Most used - Food pkg. - Power equip. (comp./robotics, min. human int.)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_5C1: Most used - Food storage - Minimal protection (some exposure)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_5C2: Most used - Food storage - Ambient conditions (closed building)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_5C3: Most used - Food storage - Some climate control (secured building)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC3_5C4: Most used - Food storage - Automated climate (security-controlled building)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_1C1: Most used - Design drawing - Manual/hand-draw**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_1C2: Most used - Design drawing - Digital/semi-digital design**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_1C3: Most used - Design drawing - CAD**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_2C1: Most used - Cutting - Manual cutting**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_2C2: Most used - Cutting - Cutting machine (manually operated)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_2C3: Most used - Cutting - Semi-Automatic cutting machine**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC4_2C4: Most used - Cutting - Automatic/Computerized cutting machine (no Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_2C5: Most used - Cutting - Automatic/Computerized cutting machine (Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_3C1: Most used - Sewing - Manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_3C2: Most used - Sewing - Machine (manually operated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_3C3: Most used - Sewing - Semi-automated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_3C4: Most used - Sewing - Automated machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_3C5: Most used - Sewing - 3D Knitting

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_4C1: Most used - Finishing/ironing - Basic manual ironing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_4C2: Most used - Finishing/ironing - Electric high-pressure steam iron

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_4C3: Most used - Finishing/ironing - Tunnel finisher

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_4C4: Most used - Finishing/ironing - Form finishing machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC4_4C5: Most used - Finishing/ironing - High tech pressing machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C1: Most used - Assembly/fabrication - Machines (controlled by operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C2: Most used - Assembly/fabrication - FMC or FMS**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C3: Most used - Assembly/fabrication - Lasers (materials processing)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C4: Most used - Assembly/fabrication - CNC machinery**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C5: Most used - Assembly/fabrication - Robots**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_1C6: Most used - Assembly/fabrication - Additive manufacturing**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C1: Most used - Body press/welding - Pressing of skin panels (operators)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C2: Most used - Body press/welding - Pressing of structural components (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C3: Most used - Body press/welding - Welding of main body (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C4: Most used - Body press/welding - Pressing of skin panels (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C5: Most used - Body press/welding - Pressing of structural components (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_2C6: Most used - Body press/welding - Welding of main body (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_3C1: Most used - Painting - Water-based painting (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_3C2: Most used - Painting - Solvent-based painting (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_3C3: Most used - Painting - Water-based painting (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_3C4: Most used - Painting - Solvent-based painting (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_4C1: Most used - Plastic injection- Non-visible interior plastic (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_4C2: Most used - Plastic injection - Plastic exterior body parts (operators)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_4C3: Most used - Plastic injection- Non-visible interior plastic (robotics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_4C4: Most used - Plastic injection - Plastic exterior body parts (robotics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_5C1: Most used - Productive asset mgt. - Breakdown maintenance

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_5C2: Most used - Productive asset mgt. - Preventative/predictive maintenance

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC5_5C3: Most used - Productive asset mgt. - Model Based Condition Monitoring

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_1C1: Most used - Air filtration - Unfiltered air

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_1C2: Most used - Air filtration - Basic

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_1C3: Most used - Air filtration - HEPA

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_1C4: Most used - Air filtration - Ultra HEPA, pressurization control

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_2C1: Most used - Weighting - Beam Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_2C2: Most used - Weighting - Analog Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_2C3: Most used - Weighting - Electronic Scales

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_2C4: Most used - Weighting - Automated Weighing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_3C1: Most used - Mixing/compounding - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_3C2: Most used - Mixing/compounding - Planetary Mixers OR homogenizers

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_3C3: Most used - Mixing/compounding - High Speed, High Shear Granulators

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_3C4: Most used - Mixing/compounding - Fluid Bed Processors (not with syrups)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_3C5: Most used - Mixing/compounding - Fully Automated Compounding

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_4C1: Most used - Compression/encapsulation - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_4C2: Most used - Compression/encapsulation - Motorized

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_4C3: Most used - Compression/encapsulation - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC6_4C4: Most used - Compression/encapsulation - Integrated**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_5C1: Most used - Quality control - Manual, titrimetric/chromatographic**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_5C2: Most used - Quality control - Elec. chromatography**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_5C3: Most used - Quality control - Elec. chromatography w data acquisition**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_6C1: Most used - Packaging - Manual filling pills or syrups**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_6C2: Most used - Packaging - Slat Counters, Cottoners, etc; machine filling**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC6_6C3: Most used - Packaging - Automated, integrated packaging lines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_1C1: Most used - Cust. serv. - Store

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_1C2: Most used - Cust. serv. - Phone or Help Desk

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_1C3: Most used - Cust. serv. - Social Media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_1C4: Most used - Cust. serv. - Online requests

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_1C5: Most used - Cust. serv. - Chatbots

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_2C1: Most used - Pricing - Manual Cost

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_2C2: Most used - Pricing - Automated markup

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_2C3: Most used - Pricing - Automated promotional

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_2C4: Most used - Pricing - Dynamic pricing systems

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_2C5: Most used - Pricing - Personalized pricing (predictive analytics)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_3C1: Most used - Merchandising - Manually selection

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_3C2: Most used - Merchandising - Category mgt.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_3C3: Most used - Merchandising - Retail Merch. Systems or Digital Merch.**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_3C4: Most used - Merchandising - Product trend analytics**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_4C1: Most used - Inventory - Handwritten record keeping**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_4C2: Most used - Inventory - Computer databases (manual updates)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_4C3: Most used - Inventory - WMS (specialised software)**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_4C4: Most used - Inventory - CAO, vendor-managed, and/or radio-frequency identificati**Data file:** fat0_raw_data_qje**Overview**Type: Discrete Width: 8 Range: - Format: Numeric

IC7_4C5: Most used - Inventory - AS/RS

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C1: Most used - Ad channels - Paper based communication

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C2: Most used - Ad channels - Radio, Billboards, TV

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C3: Most used - Ad channels - Email or mobile phone

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C4: Most used - Ad channels - Social Media

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C5: Most used - Ad channels - Search Engine Marketing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC7_5C6: Most used - Ad channels - Big data Analytics or AI

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_1C1: Most used - Cust. serv. - Teller

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_1C2: Most used - Cust. serv. - ATM machines

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_1C3: Most used - Cust. serv. - On-line on company website

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_1C4: Most used - Cust. serv. - Mobile app

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C1: Most used - Verification id - Teller

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C2: Most used - Verification id - online passwords

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C3: Most used - Verification id - online passwords (combined)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C4: Most used - Verification id - Digital auth.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C5: Most used - Verification id - Biometrics

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_2C6: Most used - Verification id - Blockchain

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_3C1: Most used - Loan app - Loan officer (paper-based)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_3C2: Most used - Loan app - Mobile app + paper

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_3C3: Most used - Loan app - Channel partners

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_4C1: Most used - Credit approvals - Analyst (paper-based)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_4C2: Most used - Credit approvals - Analyst (digital info)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_4C3: Most used - Credit approvals - Automated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_4C4: Most used - Credit approvals - Algorithm (AI or Big-Data)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_5C1: Most used - Op. supp. - writing records

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_5C2: Most used - Op. supp. - dig. accounting (PCs)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC8_5C3: Most used - Op. supp. - dig. network

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_1C1: Most used - Transportation planning - handwritten info.

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_1C2: Most used - Transportation planning - electronic file share

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_1C3: Most used - Transportation planning - installed software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_1C4: Most used - Transportation planning - real time info. with ERP

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_2C1: Most used - Loading - Manual process (fax, text, phone)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_2C2: Most used - Loading - Manual process (dig. platforms)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_2C3: Most used - Loading - web-based

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_2C4: Most used - Loading - specific software interface via Internet

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_2C5: Most used - Loading - file exchange (ERP integrated apps)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_3C1: Most used - Monitoring load/delivery - Event driven (fax, text, phone calls)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_3C2: Most used - Monitoring load/delivery - Event driven (digital)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_3C3: Most used - Monitoring load/delivery - Paper documentation

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_3C4: Most used - Monitoring load/delivery - installed softwares

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_3C5: Most used - Monitoring load/delivery - ERP integrated apps

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_4C1: Most used - Transp. perf. - manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_4C2: Most used - Transp. perf. - computer (non-specialized software)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_4C3: Most used - Transp. perf. - computer (specialised transp. reporting)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_4C4: Most used - Transp. perf. - installed software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_4C5: Most used - Transp. perf. - file exchange between ERP integrated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_5C1: Most used - Fleet management - manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_5C2: Most used - Fleet management - electronic file

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_5C3: Most used - Fleet management - ETM

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC9_5C4: Most used - Fleet management - ERP and software

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_2C1: Most used - Scheduling - Personal visit and paper

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_2C2: Most used - Scheduling - Phone call, SMS, or Email

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_2C3: Most used - Scheduling - Software or app (w/o automated reminders)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_2C4: Most used - Scheduling - Software or app (w automated reminders)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_3C1: Most used - Patient records - Handwritten process

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_3C2: Most used - Patient records - Digital patient records

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_3C3: Most used - Patient records - EHR

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC10_3C4: Most used - Patient records - Cloud-based HER

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_1C1: Most used - Design - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_1C2: Most used - Design - Digital or semi-digital

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_1C3: Most used - Design - CAD, 3D, or virtual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_2C1: Most used - Cutting - Manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_2C2: Most used - Cutting - Machine manually-operated

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_2C3: Most used - Cutting - Semi-automatic machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_2C4: Most used - Cutting - Automatic/Computerised (no Laser)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_3C1: Most used - Sewing - Manually

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_3C2: Most used - Sewing - Machine (manually)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_3C3: Most used - Sewing - Machine (semi-automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_3C4: Most used - Sewing - Machine (automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_4C1: Most used - Assembly/Finishing - manual

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_4C2: Most used - Assembly/Finishing - conveyor/assembly (static/semi-automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_4C3: Most used - Assembly/Finishing - conveyor/assembly (dynamic/automated)

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_4C4: Most used - Assembly/Finishing - injection machine

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

IC11_4C5: Most used - Assembly/Finishing - 3D printing

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 8 Range: - Format: Numeric

REGION_ID: Region

Data file: fat0_raw_data_qje

Overview

Type: Discrete Width: 9 Range: - Format: Numeric

FIRMID:

Data file: isic_data

Overview

Type: Discrete Width: 10 Range: - Format: Numeric

ISIC4D:

Data file: isic_data

Overview

Type: Discrete Width: 4 Range: - Format: Numeric

ISIC3D:

Data file: isic_data

Overview

Type: Discrete Width: 3 Range: - Format: Numeric

ISIC2D:

Data file: isic_data

Overview

Type: Discrete Width: 2 Range: - Format: Numeric

Documentation

Questionnaires

Firm Adoption of Technology (FAT) Survey Instrument

Title Firm Adoption of Technology (FAT) Survey Instrument
 Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
 Country World
 Description Firm Adoption of Technology (FAT) Survey Instrument
 Filename fat_survey_questionnaire.pdf

Technical documents

Data Dictionary

Title Data Dictionary
 Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
 Country World
 Description This data dictionary provides a detailed description of the dataset, especially "FAT0_raw_data_qje"
 Filename data_dictionary_fat_qje_final.xlsx

World Bank's Technology Adoption Survey - Implementation Manual

Title World Bank's Technology Adoption Survey - Implementation Manual
 Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
 Country World
 Description World Bank's Technology Adoption Survey - Implementation Manual
 Filename fat_implementation_manual.pdf

Complimentary Datasets

Title Complimentary Datasets
 Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
 Country World
 Description Contents: complementary datasets used in the paper
 1. Relative productivity (relative_q_productivities.xlsx)
 2. Log of GDP per capita (country_stats_2080.xlsx)
 Filename complementary_dataset.zip

Replication data for figures A12-A16

Title Replication data for figures A12-A16
 Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
 Country World
 Description Contents: 27 .csv datasets to replicate figures A12-A16.
 Filename figures_a12_a16.zip

README: Replication Package for "Technology Sophistication Across Establishments"

Title README: Replication Package for "Technology Sophistication Across Establishments"
Author(s) Xavier Cirera (World Bank), Diego Comin (Dartmouth College), Marcio Cruz (IFC)
Country World
Description README: Replication Package for "Technology Sophistication Across Establishments"
Filename README.pdf
