

The Knowledge Economy

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NOTE: *within this bulletin 'Kent' refers to the Kent County Council (KCC) area which excludes Medway*

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The Knowledge Economy comprises those industries whose main purpose centres on knowledge or information, from highly technical industries and knowledge intensive services to creative industries. This includes such industries as Publishing, Scientific Research and Development and Higher Education.

This bulletin estimates the number of employee jobs and the number of enterprises which are engaged in activities related to the Knowledge Economy.

- As at 2019, there were 94,000 Knowledge Economy employee jobs in Kent (15% of all jobs) compared to 21% in the South East region and 20.4% nationally
- The number in Kent has fallen over the last year (-1.6%). A similar drop was seen regionally (-1.2%) while nationally they have increased by 2.5%
- Canterbury (22.6%), Sevenoaks (22.5%) and Tunbridge Wells (22.1%) had the highest concentration of Knowledge Economy jobs
- As at 2020 there were 20,180 Knowledge Economy enterprises accounting for 31.5% of all enterprises (South East 37.0%, Great Britain 32.8%)
- Dartford saw the biggest increase in Knowledge Economy Enterprises since 2010 (+835 enterprises, +110.6%)
- Tunbridge Wells had the highest proportion of Knowledge Economy enterprises (41%) in Kent

Introduction

The knowledge economy is of particular interest as it is seen as a key driver for economic growth in the UK. The industries that fall within this sub-set of the economy are the ones that deal extensively with the processing, exchange and communication of information and knowledge. They are likely to have a high dependency on technology and provide highly skilled and technical jobs. They are also likely to contribute a higher level of “value added” to the economy (a higher level of output per head).

Defining the knowledge economy

There is no single official definition of the Knowledge Economy therefore many different definitions are in use. The definition used in this bulletin is:

a group of specific sectors within the economy that are knowledge intensive in their activity. They deal extensively with information/information technology and their business is all about the distribution or exchange of the information that they hold.

Table 1 shows the industries that have been included in the Knowledge Economy in this bulletin. It shows the detailed industry headings that have been included using the 2007 Standard Industrial Classification (2007SIC).

Further information about the 2007 Standard Industrial Classification can be found on the Office for National Statistics [Standard Classifications webpages](#).

Table 1: Knowledge Economy - 2007 SIC definition

2007 SIC definition	
2007 SIC group	Description
Computing	
	62 Computer programming, consultancy and related activities
	631 Data processing
	262 Manufacture of computers and peripheral equipment
Telecommunications	
	61 Telecommunications
Media	
	18 Printing and reproduction of recorded media
	58 Publishing activities
	263 Manufacture of communication equipment
	591 Motion picture, video and television programme activities
	60 Programming and broadcasting activities
	639 Other information service activities
Research & Development	
	72 Scientific research and development
Business Services	
	64 Financial service activities, except insurance and pension funding
	65 Insurance, reinsurance and pension funding, except compulsory social security
	66 Activities auxiliary to financial services and insurance activities
	69 Legal and accounting activities
	70 Activities of head offices; management consultancy activities
	732 Market research and public opinion polling
	711 Architectural and engineering activities and related technical consultancy
	712 Technical testing and analysis
	731 Advertising
	74 Other professional, scientific and technical activities
	82 Office administrative, office support and other business support activities
Higher Education	
	854 Higher education
Public Services	
	91 Libraries, archives, museums and other cultural activities

This bulletin uses two datasets looking at the number of employee jobs and the number of businesses within the Knowledge Economy.

Business Register and Employment Survey (BRES)

The Business Register and Employment Survey (BRES) is the official source of employee and employment estimates by detailed geography and industry.

Produced by The Office for National Statistics, the BRES is a sample survey which collects employment information from businesses across the whole of

the Great Britain economy for each site that they operate. The survey covers all businesses in Great Britain registered for VAT and/or PAYE. The BRES does not cover the very small businesses neither registered for VAT nor PAYE, neither does it include self employed workers unless they are registered for VAT or PAYE.

The BRES is a sample survey of approximately 80,000 businesses. As such it may be subject to sampling errors. The estimates are of a good quality at higher levels of geography (for example region), however the quality of the estimates deteriorates as the geographies get smaller. This should be taken into account when considering the quality of county and district estimates

In accordance with official guidelines the data is rounded to the nearest 100 prior to publication. Percentages are calculated using unrounded data.

Data is available for the years 2015 to 2019. Data for 2020 is due to be released in the Autumn of 2021.

Using data from the BRES those industries whose main purpose centres on knowledge or information have been grouped to present a picture of the number of employee jobs within the Knowledge Economy in Kent.

UK Business Counts

The UK Business Counts dataset records the number of enterprises that were live at a reference date in March each year, giving a snap shot of businesses that were live at this point in time. Produced by the Office for National Statistics, The UK Business Counts dataset is an extract compiled from the Inter Departmental Business Register (IDBR) which contains information on VAT traders and PAYE employers. Enterprise statistics presented in this bulletin are broken down by industry and employee sizeband of business. Data are available for the years 2010 to 2020. Data for 2021 is due to be released in Autumn 2021.

This bulletin looks at the number of Knowledge Economy employees and enterprises in Kent and Kent local authorities. Regional and national figures are included for comparison.

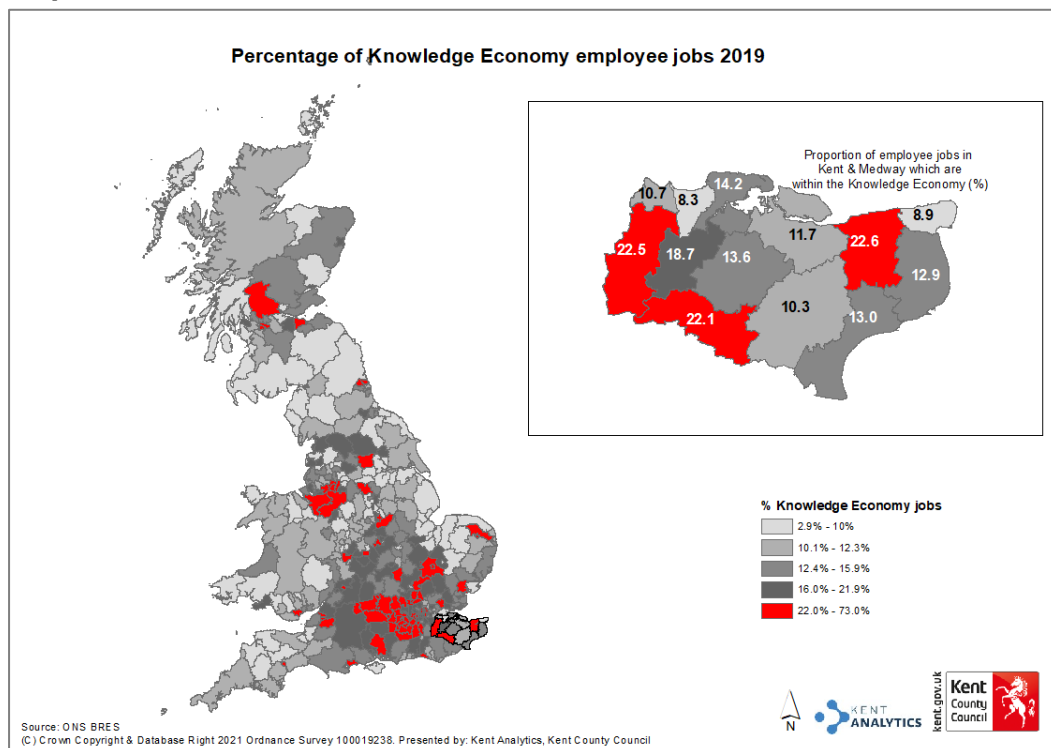
Analysis

The following map shows the proportion of employee jobs which are defined as within the knowledge economy as at 2019.

The top 20% of authorities with the highest proportion of knowledge economy employee jobs are shown in red.

The map shows a concentration of areas within and to the west of London with some of the highest proportions of knowledge economy jobs. Further concentrations can be seen around the major cities in the country.

Map 1



The top ten authorities with the highest proportion of knowledge economy jobs are presented in table 2.

Table 2: Authorities with the highest proportion of knowledge economy employee jobs, 2019

Authority	% employee jobs in the Knowledge Economy
City of London	73.0%
Tower Hamlets	52.2%
Islington	47.5%
Camden	44.2%
Cambridge	42.7%
Southwark	41.6%
Oxford	38.7%
Westminster	38.6%
South Cambridgeshire	38.4%
Wokingham	37.6%

Source: BRES

Prepared by: Kent Analytics, Kent County Council

Chart 1 overleaf shows the percentage of Knowledge Economy employees in Kent local authorities compared to all other local authorities in Great Britain.

Canterbury (22.6%), Sevenoaks (22.5%) and Tunbridge Wells (22.1%) are all within the top 20% of local authorities in the country with the highest density of Knowledge Economy employees (those with 22.0% or more).

Thanet (8.9%) and Gravesham (8.3%) are within the 20% of local authorities with the lowest density of Knowledge Economy employees (those with 10% or less).

Chart 1: Percentage of Knowledge Economy employee jobs in GB local authorities

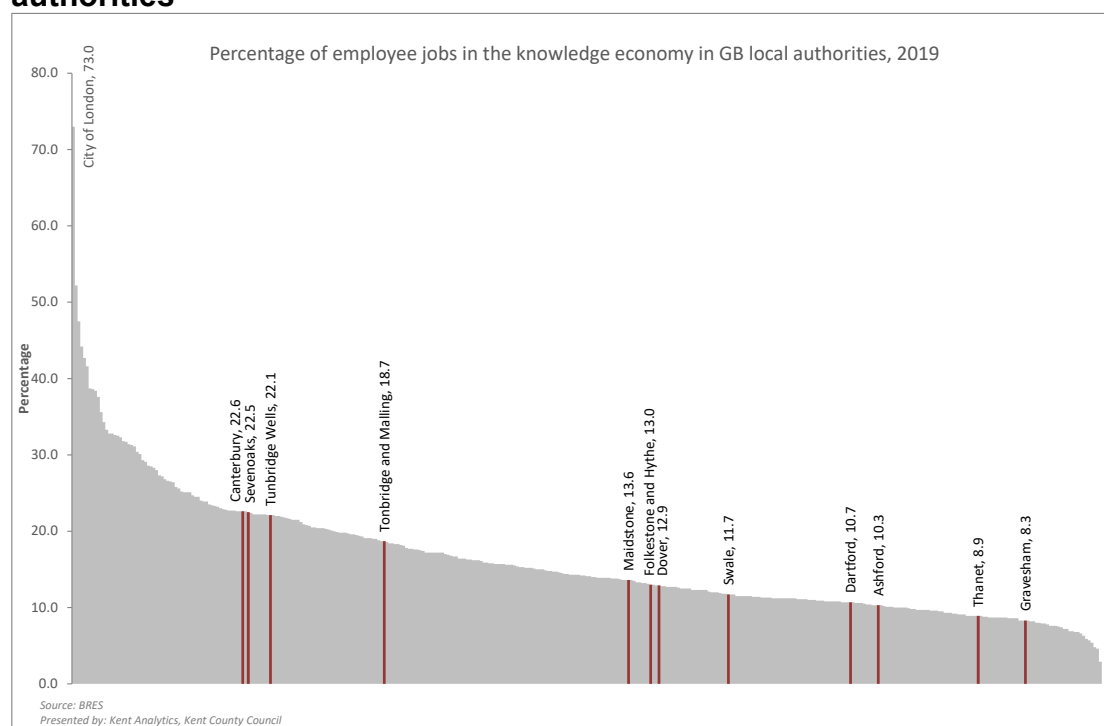


Table 3 shows the number of Knowledge Economy jobs in Kent and its local authorities from 2015 to 2019 with regional and national comparisons.

Table 3: Employee jobs in the Knowledge Economy in Kent districts, 2015-2019

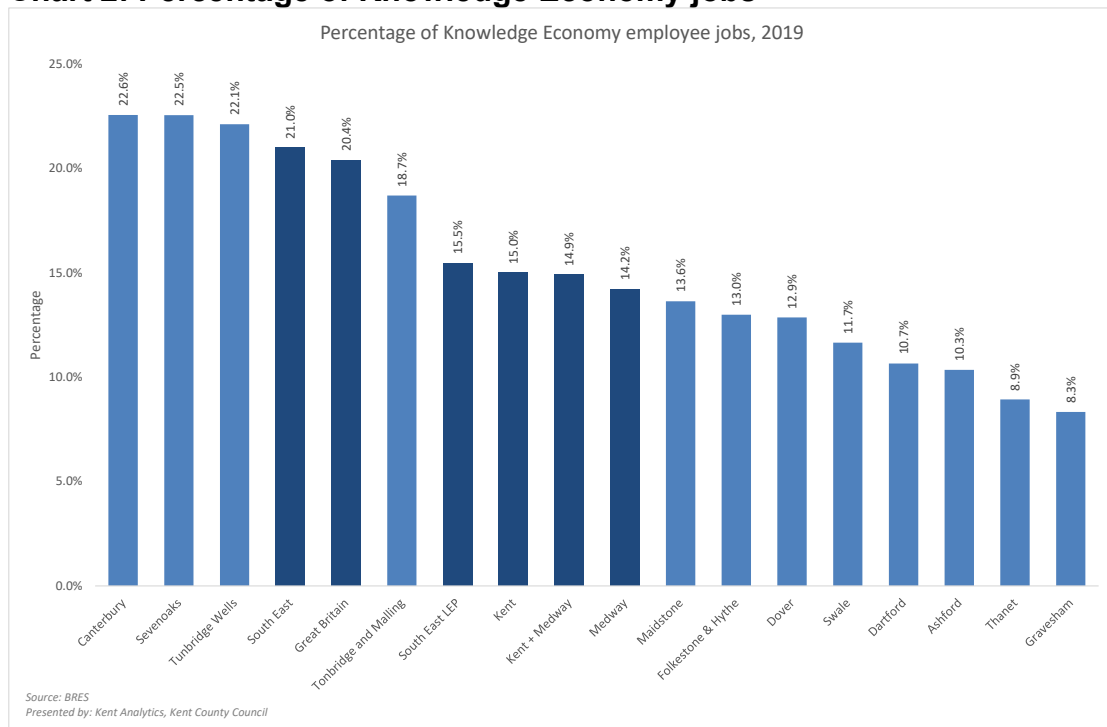
	Number					Percentage				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Ashford	7,000	7,000	6,000	6,000	6,000	12.8%	12.5%	10.6%	10.8%	10.3%
Canterbury	13,500	17,000	15,500	16,500	15,000	21.4%	26.2%	23.0%	24.8%	22.6%
Dartford	6,500	6,500	6,000	7,000	6,500	10.4%	10.4%	10.4%	11.7%	10.7%
Dover	3,800	4,000	3,500	3,800	4,500	10.9%	12.1%	10.3%	11.2%	12.9%
Folkestone & Hythe	4,500	5,000	4,300	5,000	5,000	12.2%	13.7%	12.0%	13.9%	13.0%
Gravesham	2,400	2,800	2,300	2,800	2,800	8.2%	9.0%	7.0%	8.6%	8.3%
Maidstone	10,500	10,000	9,000	10,000	10,500	13.9%	13.2%	12.0%	13.3%	13.6%
Sevenoaks	9,500	11,500	14,000	12,000	11,500	18.8%	22.8%	25.9%	24.0%	22.5%
Swale	5,500	6,000	5,000	5,000	6,000	11.1%	11.9%	9.9%	9.7%	11.7%
Thanet	4,300	4,300	3,800	3,800	3,800	10.2%	10.4%	8.9%	9.0%	8.9%
Tonbridge & Malling	11,500	12,500	11,000	11,500	11,500	20.0%	21.4%	19.0%	19.7%	18.7%
Tunbridge Wells	22,000	13,500	11,500	12,000	11,500	35.5%	25.2%	22.3%	23.5%	22.1%
Kent	101,000	100,500	92,000	95,500	94,000	16.4%	16.4%	15.0%	15.6%	15.0%
Medway	12,500	14,000	12,500	13,500	13,500	14.2%	15.2%	13.7%	14.4%	14.2%
Kent + Medway	113,500	114,500	104,500	109,000	107,500	16.1%	16.2%	14.8%	15.5%	14.9%
South East LEP	247,500	255,000	250,500	251,000	251,500	15.8%	16.1%	15.6%	15.6%	15.5%
South East	897,500	932,500	850,000	895,500	885,000	22.0%	22.5%	20.7%	21.6%	21.0%
Great Britain	5,700,500	5,927,500	5,956,000	5,982,000	6,134,500	19.8%	20.3%	20.2%	20.1%	20.4%

Source: BRES
Prepared by: Kent Analytics, Kent County Council

Canterbury district has the highest number of Knowledge Economy jobs in Kent (15,000) accounting for just over a fifth of all jobs in the district.

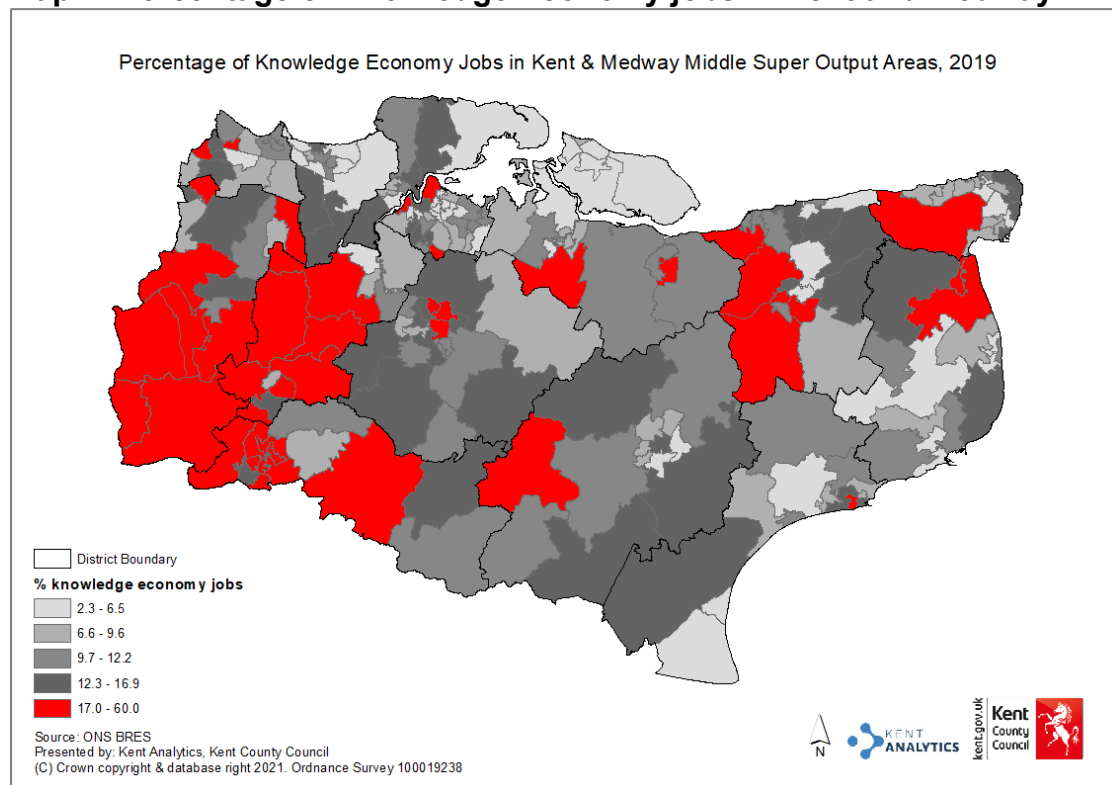
Sevenoaks, Canterbury and Tunbridge Wells all have a higher proportion of Knowledge Economy jobs than seen both regionally and nationally.

Chart 2: Percentage of Knowledge Economy jobs



Map 2 shows the areas with the highest proportion of Knowledge Economy jobs across Kent and Medway.

Map 2: Percentage of Knowledge Economy jobs in Kent and Medway.



Overall, the number of employee jobs in Kent in the Knowledge Economy has fallen by 1.6% since the previous year. The South East saw a similar fall of 1.2% while nationally it increased by 2.5%.

The number of Knowledge Economy jobs in Kent is lower than it was in 2015. Kent has 7,000 fewer Knowledge Economy jobs than in 2015 (a reduction of 6.9%). The South East region has also seen a small decline (-1.4%) while nationally there was an increase of 7.6%.

Table 4: Change in Knowledge Economy employee jobs

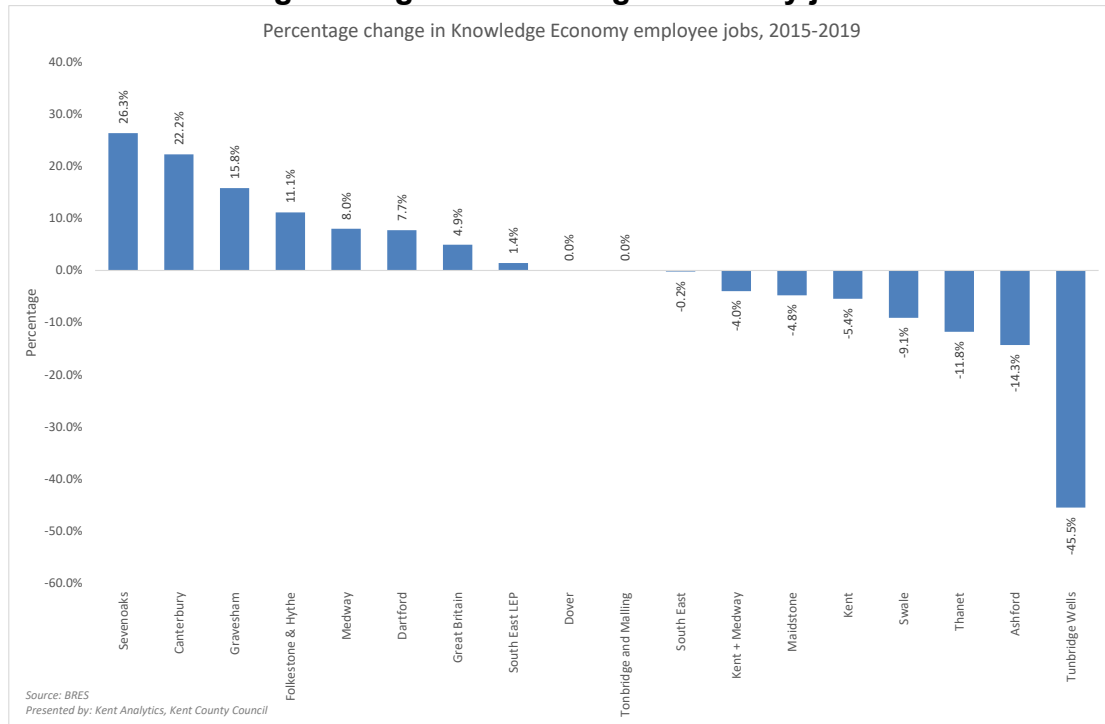
	Change 2018-2019		Change 2015-2019	
	No.	%	No.	%
Ashford	0	0.0%	-1,000	-14.3%
Canterbury	-1,500	-9.1%	1,500	11.1%
Dartford	-500	-7.1%	0	0.0%
Dover	800	20.0%	800	20.0%
Folkestone & Hythe	0	0.0%	500	11.1%
Gravesham	0	0.0%	400	15.8%
Maidstone	500	5.0%	0	0.0%
Sevenoaks	-500	-4.2%	2,000	21.1%
Swale	1,000	20.0%	500	9.1%
Thanet	0	0.0%	-500	-11.8%
Tonbridge & Malling	0	0.0%	0	0.0%
Tunbridge Wells	-500	-4.2%	-10,500	-47.7%
Kent	-1,500	-1.6%	-7,000	-6.9%
Medway	0	0.0%	1,000	8.0%
Kent + Medway	-1,500	-1.4%	-6,000	-5.3%
South East LEP	500	0.2%	4,000	1.6%
South East	-10,500	-1.2%	-12,500	-1.4%
Great Britain	152,500	2.5%	434,000	7.6%

Source: BRES

Prepared by: Kent Analytics, Kent County Council

Chart 3 overleaf shows the change in Knowledge Economy jobs since 2015. The data indicates that Tunbridge Wells has seen a significant reduction in Knowledge Economy jobs, however it would appear that the estimate for 2015 is very high compared to later years. This may be as a result of sampling errors within the estimates themselves. The BRES is a sample survey and produces estimated employment figures. These estimates are of a good quality at higher levels of geography (for example region) however the quality of the estimates deteriorates as the geographies get smaller. This should be taken into account when considering the quality of county and district estimates.

Chart 3: Percentage change in Knowledge Economy jobs since 2015



The Knowledge Economy is made up of seven sub-sectors. In descending order of employee size these are Business Services, Computing, Higher Education, Media, Research & Development, Telecommunications and Public Services. Chart 4 shows the proportion of Knowledge Economy jobs in Kent in each of the subsectors.

Chart 4: Knowledge Economy subsectors in Kent

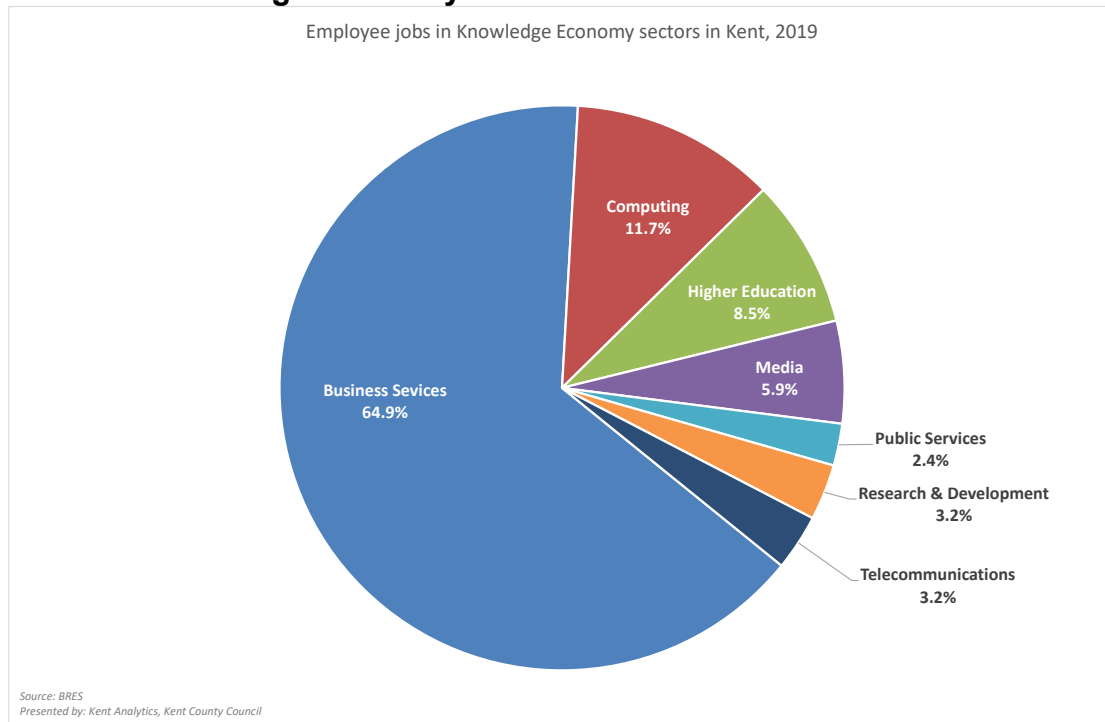


Table 5 shows the number of Knowledge Economy jobs in each of the subsectors in Kent local authorities in 2019.

Table 5: Number of Knowledge Economy jobs by subsector

2019	Knowledge Economy	Business Services	Computing	Higher Education	Media	Public Services	Research & Development	Telecommunications
Ashford	6,000	4,800	1,000	0	400	100	0	100
Canterbury	15,000	6,000	1,000	6,500	500	300	100	400
Dartford	6,500	3,500	1,500	0	800	0	100	400
Dover	4,500	2,000	400	0	300	300	1,300	0
Folkestone & Hythe	5,000	3,800	700	100	100	300	0	0
Gravesham	2,800	2,000	400	0	100	0	100	100
Maidstone	10,500	7,000	1,500	400	600	600	0	300
Sevenoaks	11,500	7,500	1,000	0	700	300	700	1,000
Swale	6,000	4,500	600	100	200	100	400	0
Thanet	3,800	2,500	600	200	300	100	0	0
Tonbridge and Malling	11,500	8,500	1,400	400	700	100	200	300
Tunbridge Wells	11,500	9,000	1,400	200	800	100	100	300
Kent	94,000	61,000	11,000	8,000	5,500	2,300	3,000	3,000
Medway	13,500	8,500	1,400	1,900	1,300	400	0	400
Kent + Medway	107,500	70,000	12,500	9,500	7,000	2,500	3,000	3,300
South East LEP	251,500	169,000	30,000	16,000	16,500	5,500	8,000	6,500
South East	885,000	500,000	170,000	84,500	45,000	11,500	35,500	38,500
Great Britain	6,134,500	3,983,500	791,500	501,000	393,500	104,000	151,000	210,500

Source: BRES

Prepared by: Kent Analytics, Kent County Council

Knowledge Economy Enterprises

The following map shows the proportion of enterprises which are defined as within the Knowledge Economy as at 2020.

The top 20% of local authorities in Great Britain (those where 37.4% or more enterprises are Knowledge Economy enterprises) are coloured red.

The majority of authorities with the highest proportion of Knowledge Economy enterprises can be found in London and surrounding areas in the South of the country.

Three Kent authorities (Sevenoaks, Tonbridge & Malling and Tunbridge Wells) are within the top 20% of authorities in Great Britain with the highest proportion of Knowledge Economy enterprises.

No Kent authority is within the 20% of authorities in Great Britain with the lowest proportion of Knowledge Economy enterprises (those with 21.7% or less).

Map 3: % Knowledge Economy enterprises

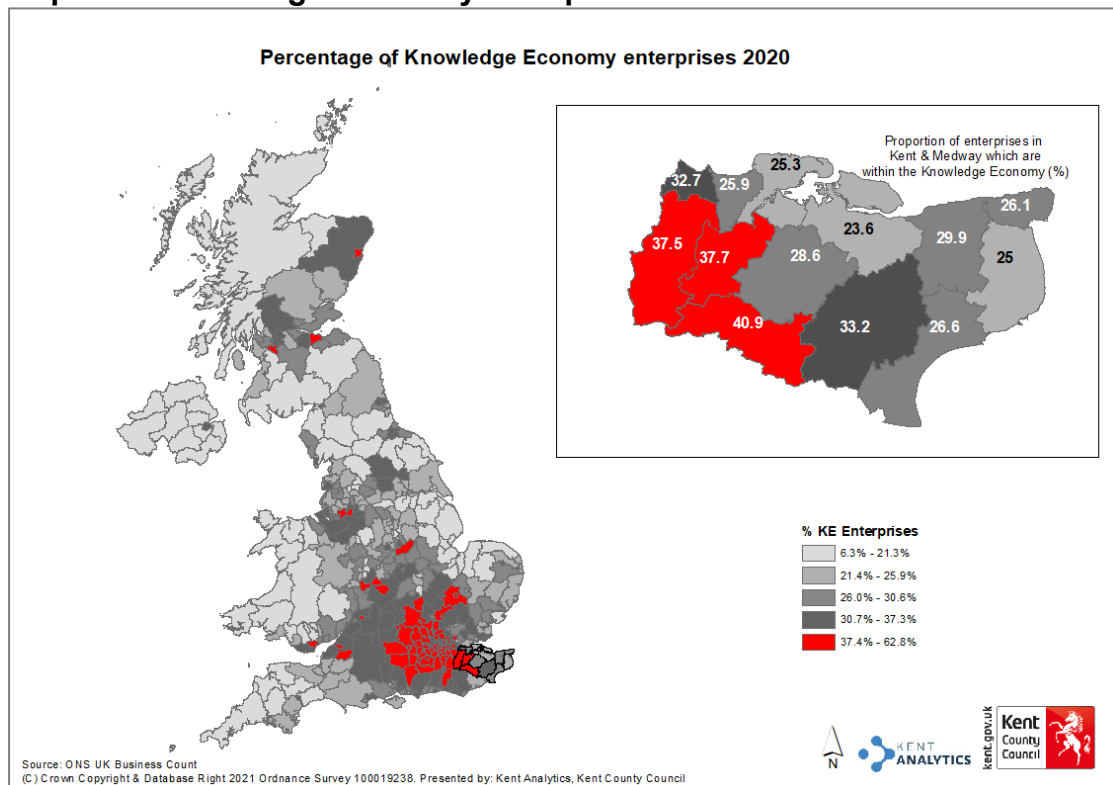


Table 6 overleaf shows those authorities in the country where at least half of the enterprises were Knowledge Economy based.

Table 6: Local authorities with the highest proportion of Knowledge Economy enterprises

Authority	% enterprises in the Knowledge Economy 2020
City of London	62.8%
Wokingham	54.8%
Islington	54.5%
Bromsgrove	54.5%
Richmond upon Thames	54.0%
Camden	53.9%
Hackney	52.9%
Wandsworth	52.5%
Tower Hamlets	52.2%
Elmbridge	51.3%
Southwark	50.6%
Aberdeen City	50.5%

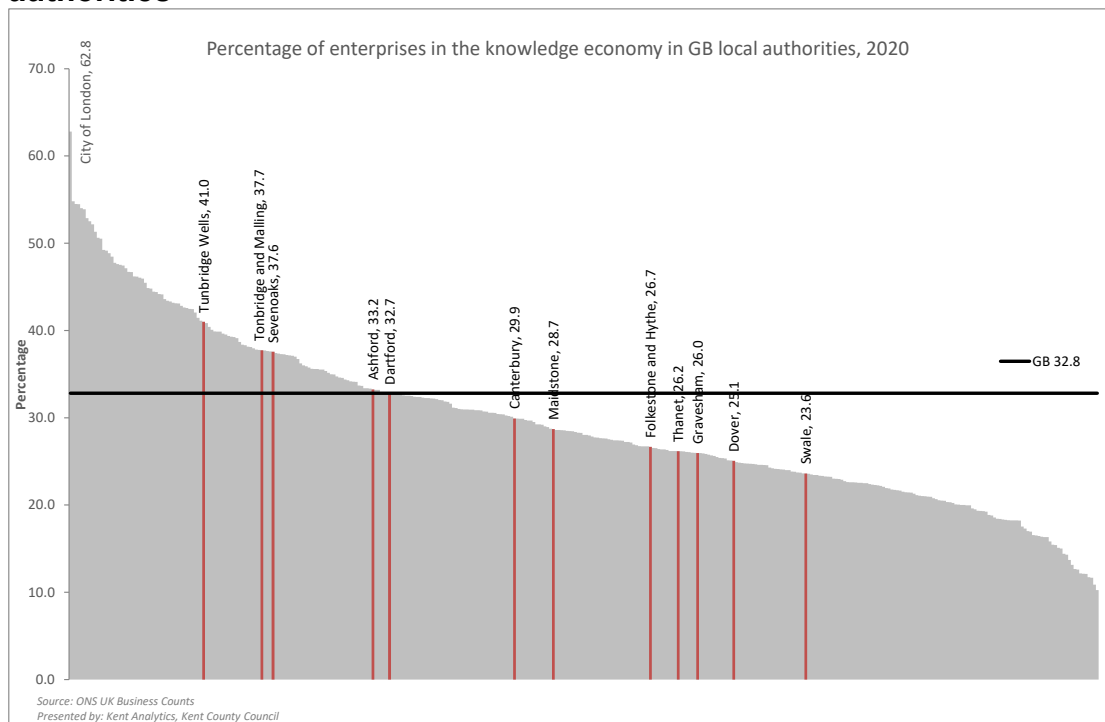
Source: ONS UK Business Counts

Presented by: Kent Analytics

Kent County Council

The proportion of Knowledge Economy enterprises in Kent local authorities compared to other authorities in Great Britain is shown in chart 5.

Chart 5: Percentage of Knowledge Economy enterprises in GB local authorities



The chart shows that four Kent authorities (Tunbridge Wells, Tonbridge & Malling, Sevenoaks and Ashford) all have a higher proportion of Knowledge Economy enterprises than the national average of 32.8%.

Table 7 shows the number of Knowledge Economy enterprises in Kent and Medway and the change in number over recent years.

Table 7: Enterprises in the Knowledge Economy in Kent local authority districts

2020	Area code	Number	Percentage	Change 2019-2020		Change since 2010	
Ashford	E07000105	2,185	33.2%	90	4.3%	785	56.1%
Canterbury	E07000106	1,615	29.9%	20	1.3%	455	39.2%
Dartford	E07000107	1,590	32.7%	45	2.9%	835	110.6%
Dover	E07000108	895	25.1%	0	0.0%	375	72.1%
Folkestone & Hythe	E07000112	1,000	26.7%	-15	-1.5%	295	41.8%
Gravesham	E07000109	1,050	26.0%	15	1.4%	415	65.4%
Maidstone	E07000110	2,195	28.7%	-25	-1.1%	435	24.7%
Sevenoaks	E07000111	2,520	37.6%	-90	-3.4%	645	34.4%
Swale	E07000113	1,185	23.6%	5	0.4%	350	41.9%
Thanet	E07000114	1,060	26.2%	80	8.2%	380	55.9%
Tonbridge and Malling	E07000115	2,285	37.7%	-25	-1.1%	765	50.3%
Tunbridge Wells	E07000116	2,595	41.0%	-105	-3.9%	605	30.4%
Kent	E10000016	20,180	31.5%	0	0.0%	6,350	45.9%
Medway	E06000035	2,255	25.4%	50	2.3%	770	51.9%
Kent + Medway		22,430	30.8%	45	0.2%	7,115	46.5%
South East LEP	E37000030	52,920	30.0%	-175	-0.3%	15,520	41.5%
South East	E12000008	154,800	37.0%	-2,320	-1.5%	41,865	37.1%
Great Britain	K03000001	877,515	32.8%	1,065	0.1%	291,290	49.7%
England	E92000001	802,490	33.6%	1,590	0.2%	266,350	49.7%

Source: ONS UK Business Counts

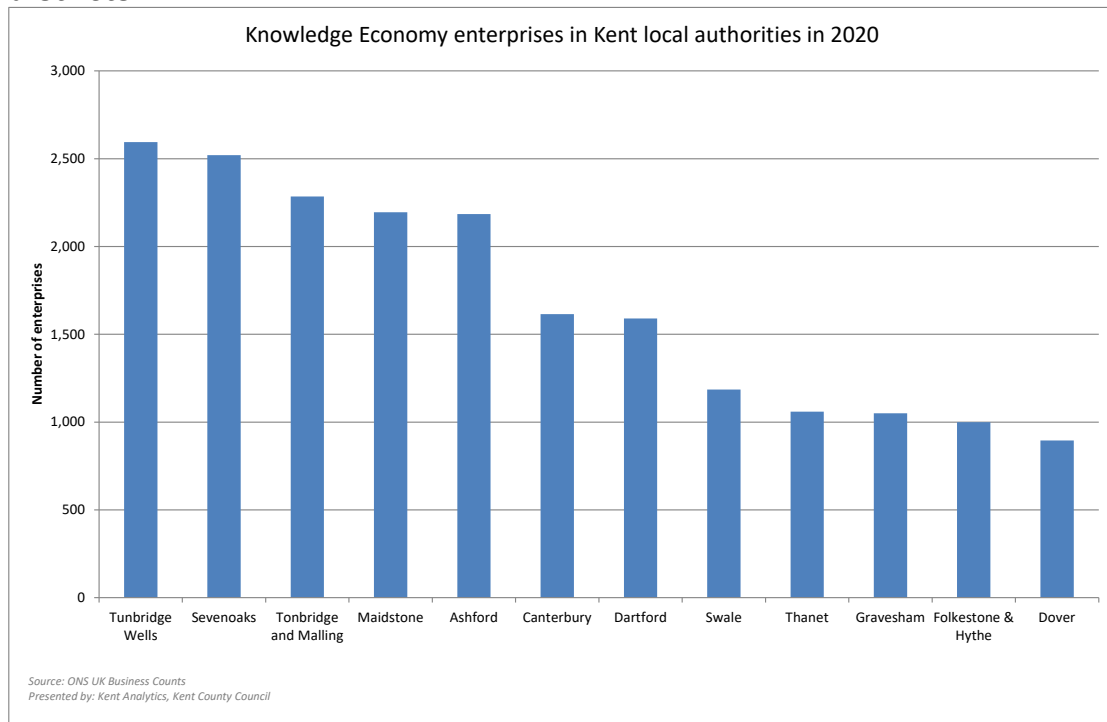
Prepared by: Kent Analytics, Kent County Council

Tunbridge Wells has the highest number of Knowledge Economy enterprises in Kent (2,595) accounting for 41.0% of all enterprises in the area.

Dover district has the lowest number of Knowledge Economy enterprises (895 enterprises accounting for 25.1% of all enterprises), and Swale has the lowest proportion of Knowledge Economy enterprises (23.6%).

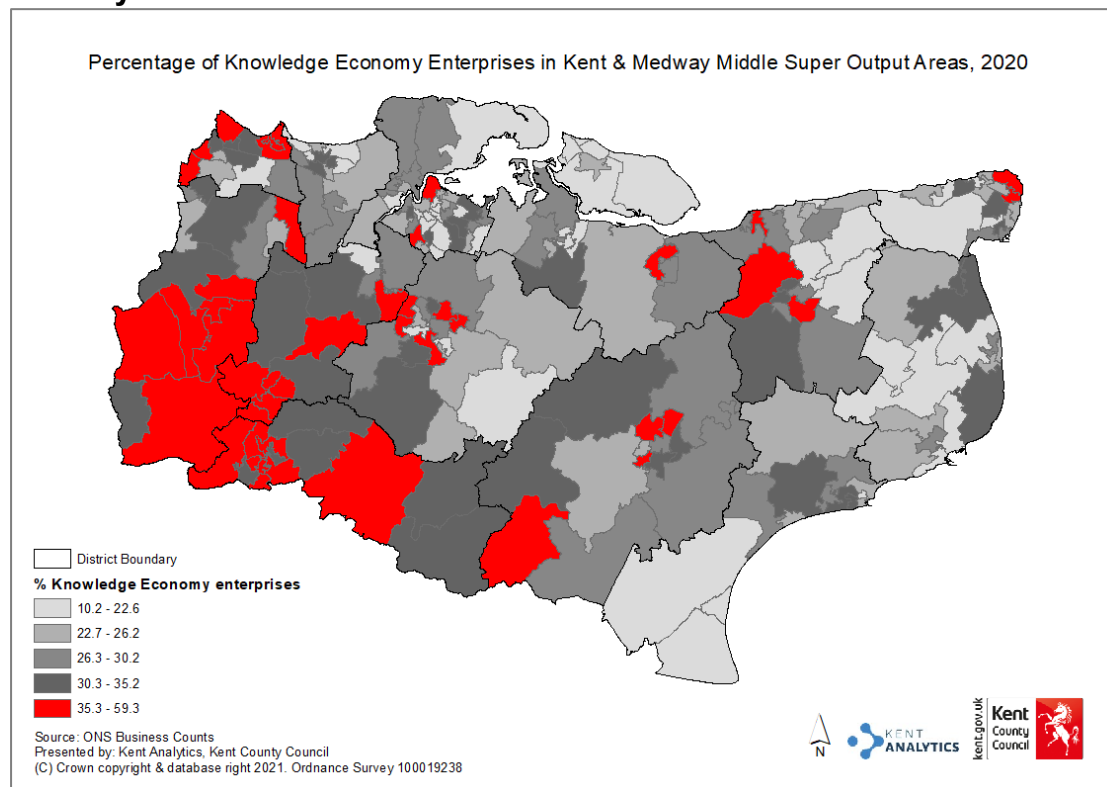
Dartford district has seen the largest growth in Knowledge Economy enterprises, more than doubling in the years since 2010.

Chart 6: Knowledge Economy enterprises in Kent local authority districts



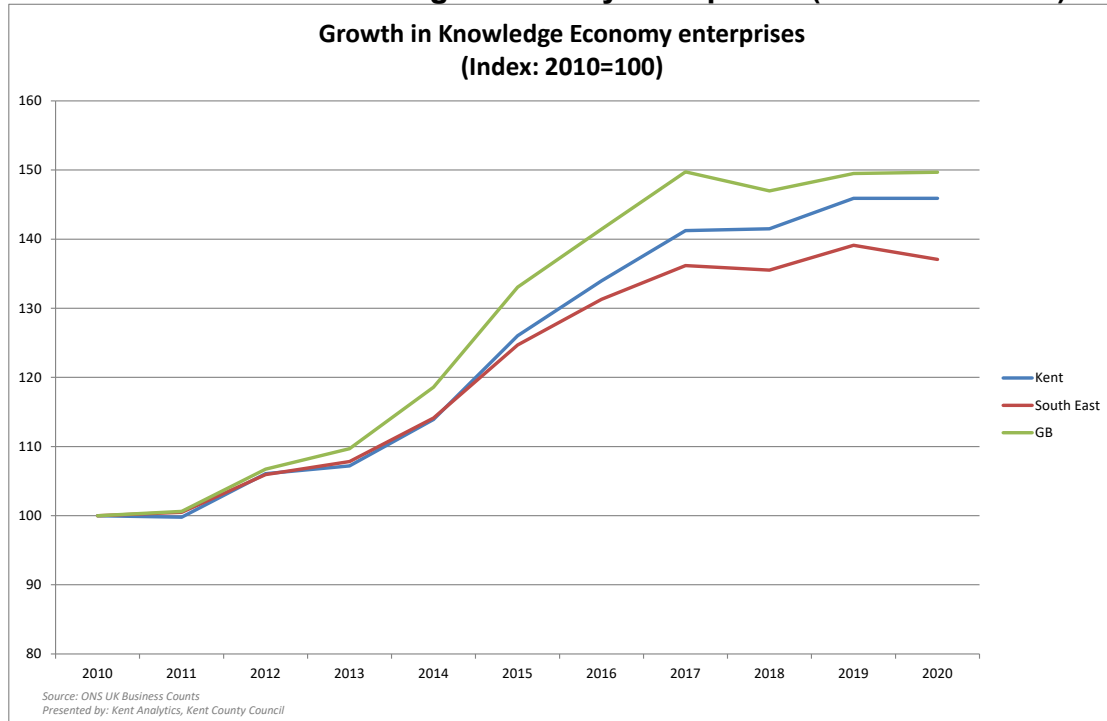
Map 4 shows that areas in the west of the county tend to have the highest concentration of Knowledge Economy enterprises.

Map 4: Percentage of Knowledge Economy enterprises in Kent & Medway



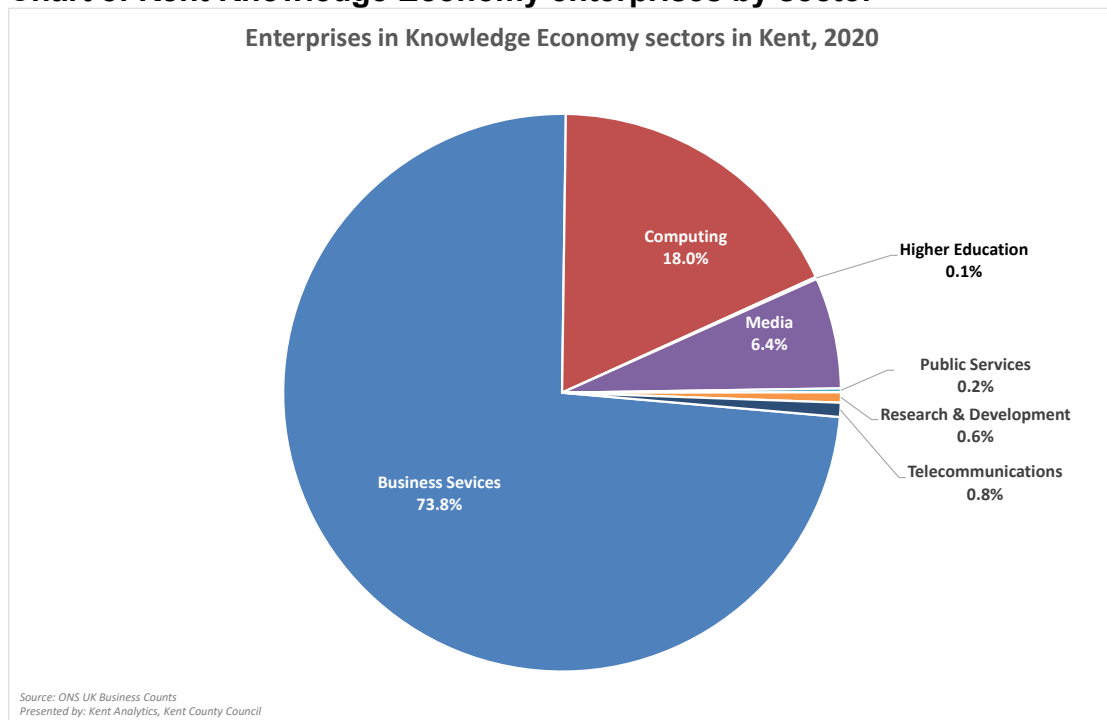
While growth in Knowledge Economy enterprises in Kent has not been as strong as seen nationally, it has still grown at a faster rate than the average for the South East as a whole.

Chart 7: Growth in Knowledge Economy enterprises (Index 2010=100)



The majority of Knowledge Economy enterprises are business services industries and account for almost three quarters of all Knowledge Economy enterprises in Kent.

Chart 8: Kent Knowledge Economy enterprises by sector



Business Services make up the biggest proportion of Knowledge Economy enterprises in all areas.

Media based enterprises make up a higher proportion of enterprises in Thanet than any other Kent district (9.9%).

Dover district has a significantly higher proportion of R&D related enterprises (3.4%) than the national average (0.6%) largely due to the legacy of the former Pfizer site, now named Discovery Park, which provides a multi-business science park.

Dartford has a higher than average proportion of enterprises in computer industries accounting for 30.5% of Knowledge Economy enterprises in the area (the Kent average is 18%).

Table 8: Knowledge Economy enterprises by sector

2020	Knowledge Economy	Business Services	Computing	Higher Education	Media	Public Services	Research & Development	Telecommunications
Ashford	2,185	1,725	335	0	100	0	10	15
Canterbury	1,615	1,200	260	5	110	5	15	15
Dartford	1,590	1,010	485	0	75	0	5	15
Dover	895	670	125	0	60	0	30	10
Folkestone & Hythe	1,000	760	155	0	65	5	5	10
Gravesham	1,050	765	225	0	50	0	5	10
Maidstone	2,195	1,655	360	0	145	5	5	20
Sevenoaks	2,520	1,845	470	0	165	10	15	15
Swale	1,185	890	190	0	70	5	10	15
Thanet	1,060	790	140	5	105	5	5	10
Tonbridge and Malling	2,285	1,690	420	5	145	5	5	15
Tunbridge Wells	2,595	1,900	460	5	210	0	5	15
Kent	20,180	14,895	3,625	25	1,300	45	120	165
Medway	2,255	1,655	440	0	110	5	10	30
Kent + Medway	22,430	16,555	4,065	30	1,410	50	125	200
South East LEP	52,920	38,705	9,985	65	3,280	105	270	515
South East	154,800	105,825	36,220	240	9,470	270	1,170	1,600
Great Britain	877,515	636,060	169,855	1,450	54,380	1,800	5,535	8,430

Source: ONS UK Business Counts

Prepared by: Kent Analytics, Kent County Council

Knowledge Economy enterprises tend to be smaller in size, employing fewer workers than the average for total industries. In Kent 90.2% of all enterprises employ less than ten employees compared to 95% of Knowledge Economy enterprises.

Table 9: Kent Knowledge Economy enterprise - sizeband

Kent	Total enterprises		Knowledge Economy enterprises	
	Number	%	Number	%
2020				
Total	64,005		20,180	
<i>Micro (0 to 9)</i>	57,720	90.2%	19,180	95.0%
<i>Small (10 to 49)</i>	5,155	8.1%	840	4.2%
<i>Medium-sized (50 to 249)</i>	925	1.4%	130	0.6%
<i>Large (250+)</i>	205	0.3%	25	0.1%

Source: ONS UK Business Counts

Prepared by: Kent Analytics, Kent County Council

Chart 9: Kent Knowledge Economy enterprises by employee sizeband

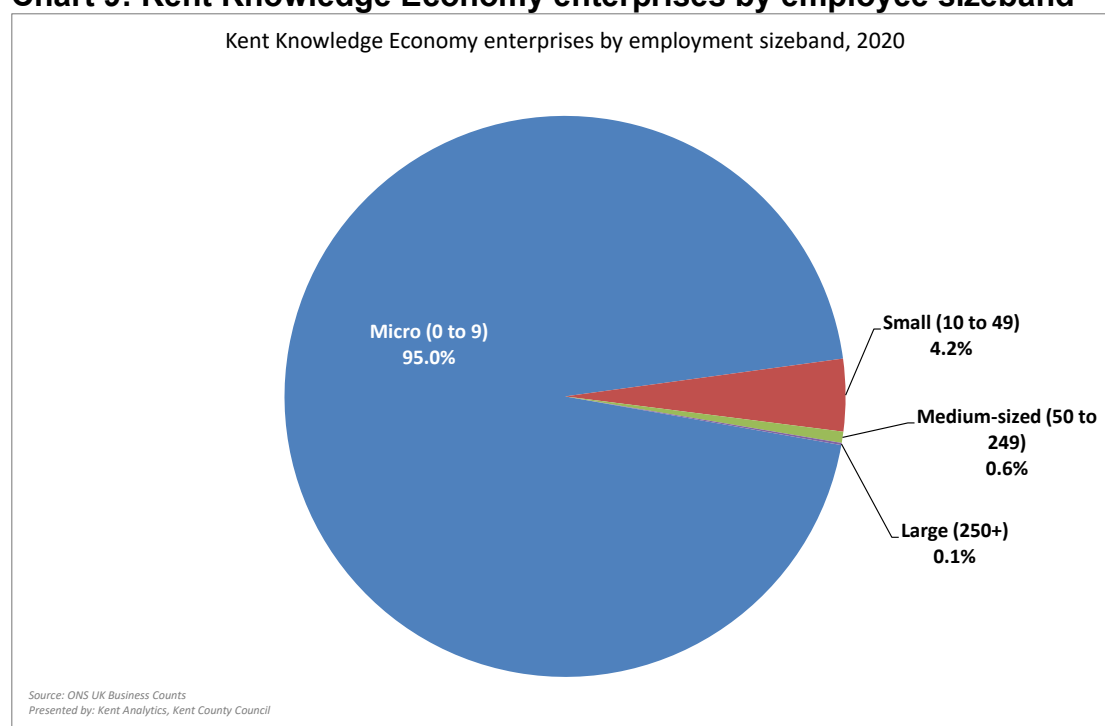


Table 9 shows the number of Knowledge Economy enterprises in each employee sizeband.

Table 9: Knowledge Economy enterprises by employee sizeband

Area	Area code	Total	Micro (0 to	Small (10 to	Medium-	Large (250+)
			9)	49)	sized (50 to 249)	
Ashford	E07000105	2,185	2,095	80	10	0
Canterbury	E07000106	1,615	1,515	80	15	5
Dartford	E07000107	1,590	1,525	55	10	0
Dover	E07000108	895	860	30	5	0
Folkestone & Hythe	E07000112	1,000	960	35	0	0
Gravesham	E07000109	1,050	1,020	25	5	0
Maidstone	E07000110	2,195	2,050	125	20	5
Sevenoaks	E07000111	2,520	2,400	95	15	5
Swale	E07000113	1,185	1,130	45	10	0
Thanet	E07000114	1,060	1,000	55	5	0
Tonbridge and Malling	E07000115	2,285	2,160	100	20	5
Tunbridge Wells	E07000116	2,595	2,465	115	15	0
Kent	E10000016	20,180	19,180	840	130	25
Medway	E06000035	2,255	2,155	80	15	5
Kent + Medway		22,430	21,335	920	145	30
South East LEP	E37000030	52,920	50,460	2,065	335	60
South East	E12000008	154,800	146,585	6,635	1,230	350
Great Britain	K03000001	877,515	824,505	42,805	8,175	2,030
England	E92000001	802,490	753,930	39,120	7,565	1,875

Source: ONS UK Business Counts

Prepared by: Kent Analytics, Kent County Council

The proportion of Knowledge Economy enterprises in Kent which could be described as micro (employing fewer than ten employees) has increased from 93.7% in 2010 to 95% in 2020, while the proportion of small and medium sized Knowledge Economy enterprises has fallen.

Table 10: Change in Kent Knowledge Economy enterprises by size since 2010

Kent	Number		Percentage	
	2010	2020	2010	2020
Total	13,830	20,180		
Micro (0 to 9)	12,965	19,180	93.7%	95.0%
Small (10 to 49)	725	840	5.2%	4.2%
Medium-sized (50 to 249)	125	130	0.9%	0.6%
Large (250+)	15	25	0.1%	0.1%

Source: ONS UK Business Counts

Prepared by: Kent Analytics, Kent County Council

Chart 10: Change in Kent Knowledge Economy enterprise size since 2010

