

CAMERA PURCHASE COMPARISON

Data Science Case Study

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CASE STUDY

- **Background**

- You're in the market to purchase your first camera.
- A friend has recommended Jessops, an online camera retailer, as a good option to consider.
- Being unfamiliar with cameras you want to better understand the range of cameras offered by Jessops, but generally you are interested in Mirrorless, DSLR and compact cameras.
- Beyond the products offered by Jessops, you want to make sure you're getting the best price in the market so want to compare their product offering with competing retailers.

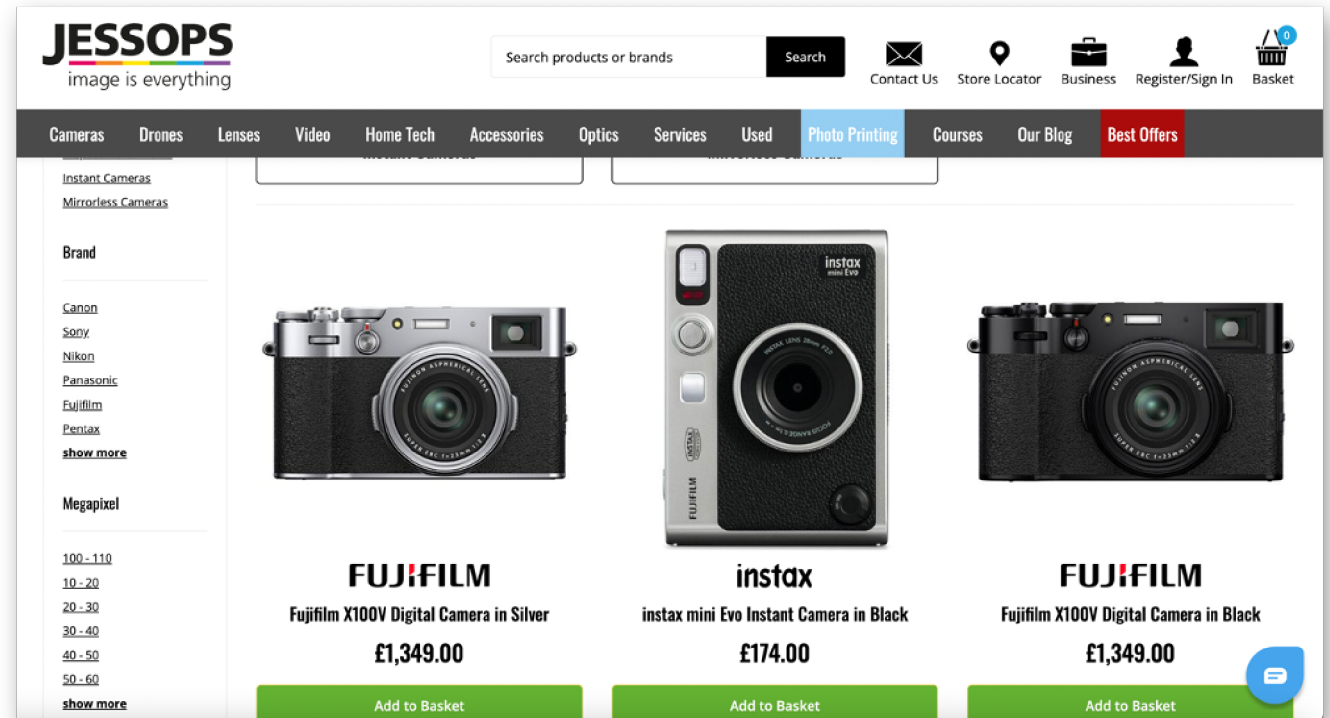
- **Aims**

1. Build a scraper for Jessops to understand their range of products and price
2. Make a comparison of Jessops prices and products relative to their competition
3. Present your findings in a few slides or within a notebook

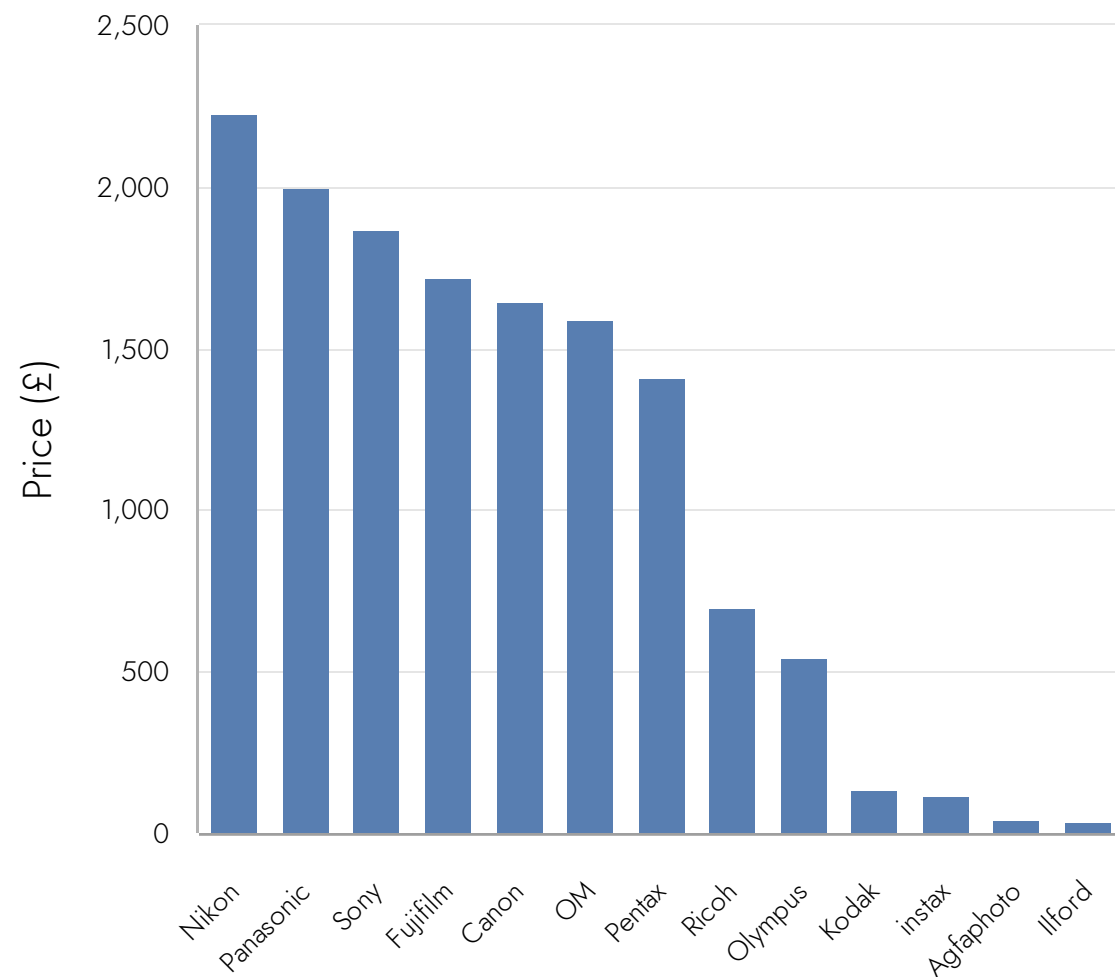
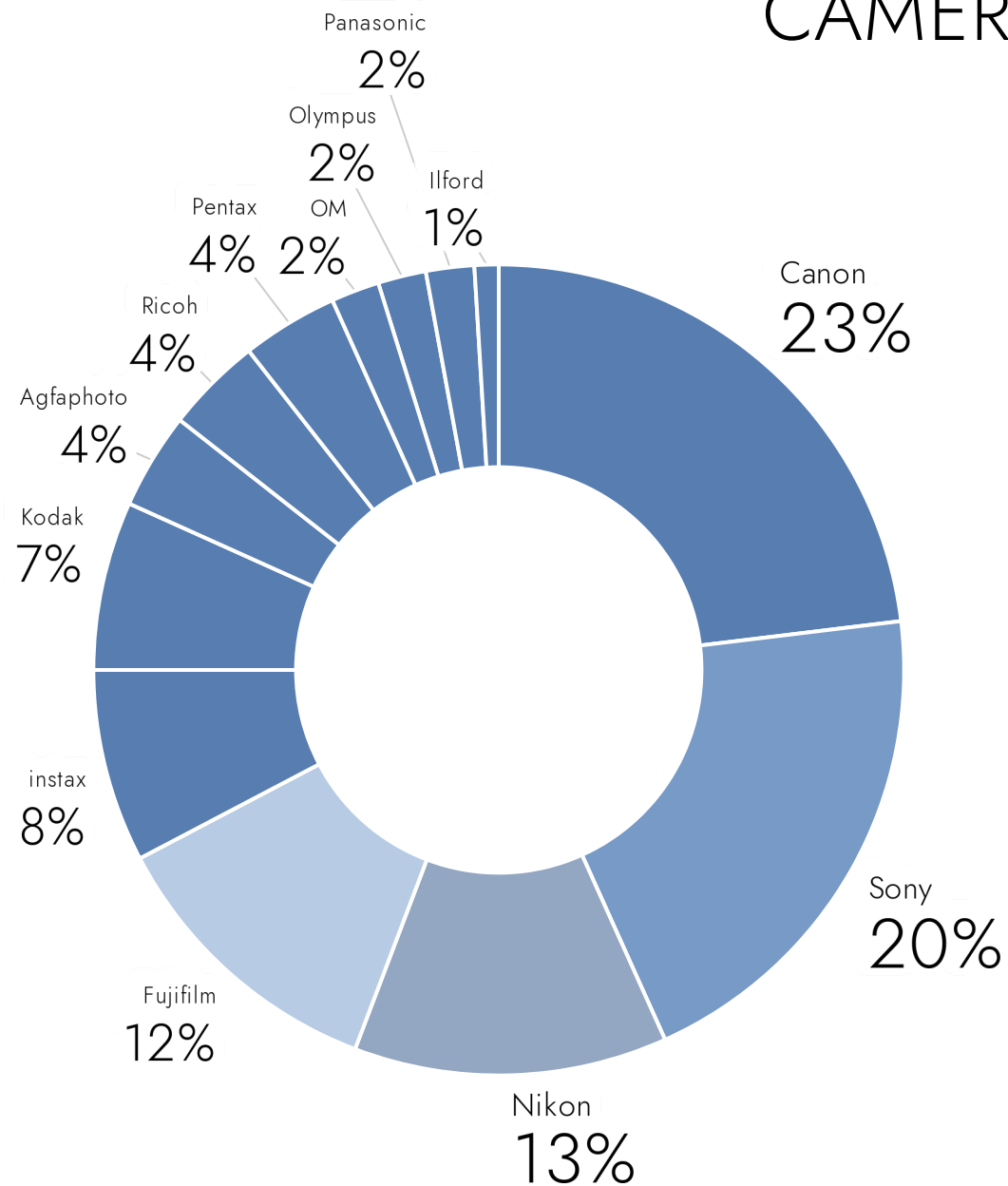


JESSOPS OVERVIEW

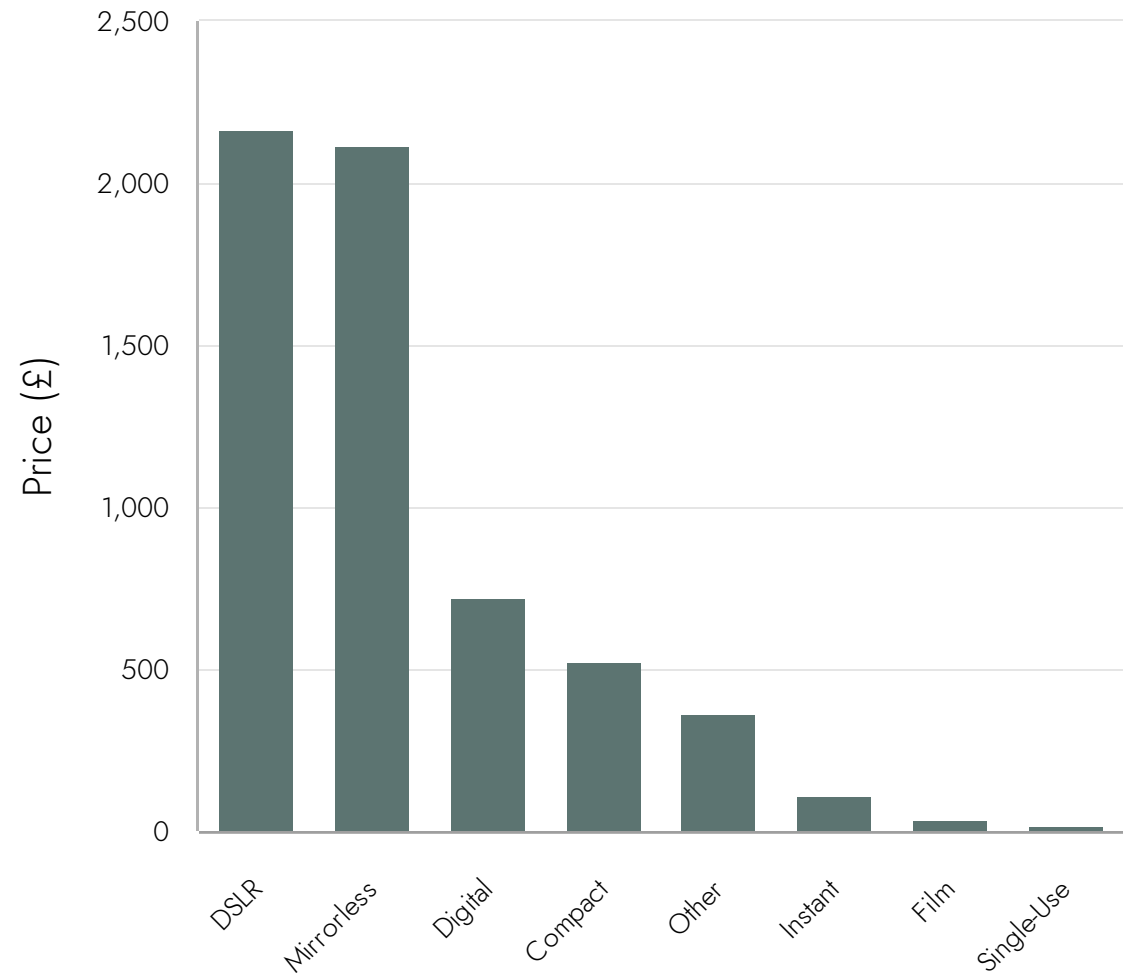
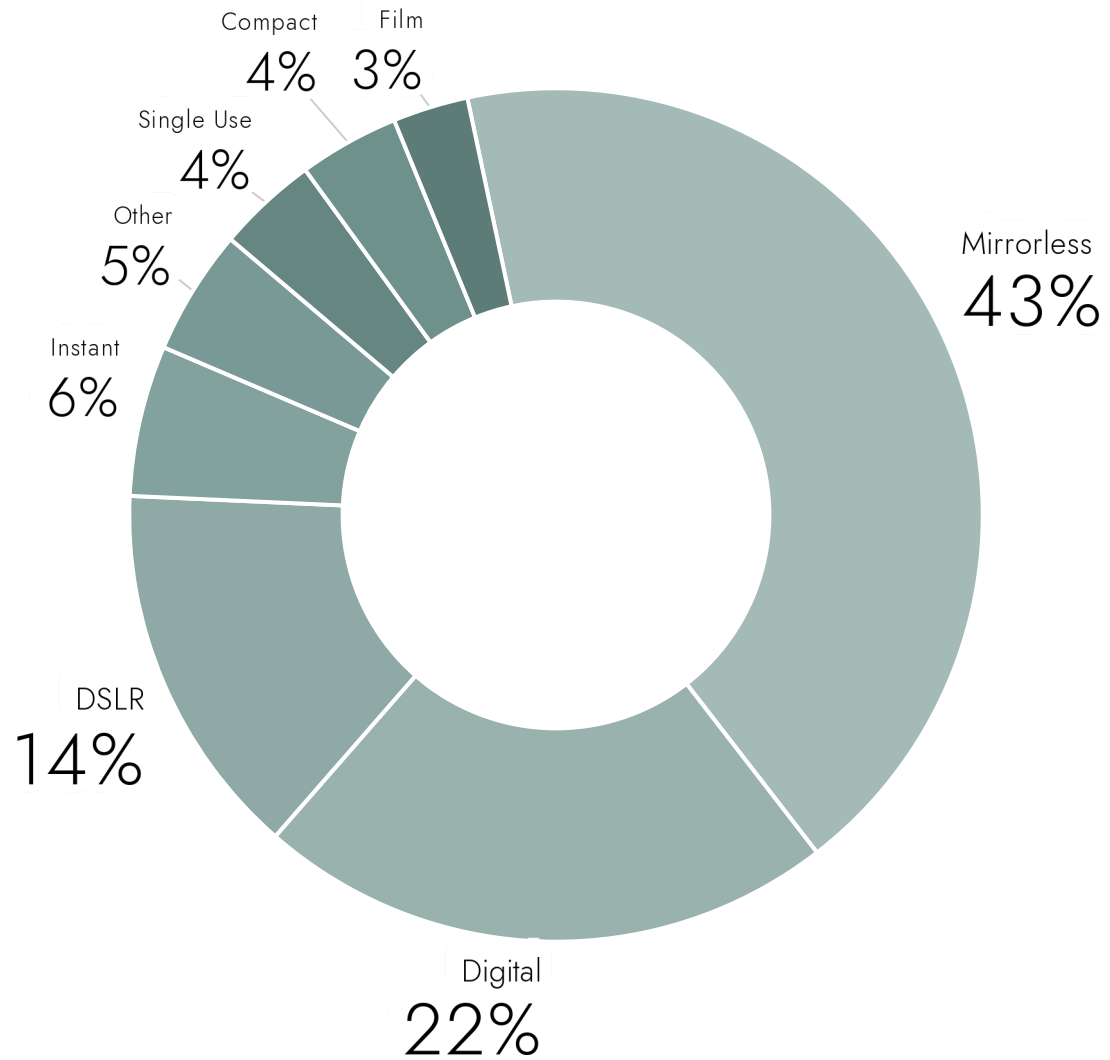
- 105 Unique Products
- 13 brands
- 8 camera styles
- Average camera price: £1,415



CAMERA BRANDS



CAMERA STYLES



TLDR; JESSOPS

BRANDS

- **Canon, Sony, and Nikon** are the most common brands
- On average, Nikon cameras are most expensive
- Ilford and Agfaphoto the cheapest
- Range in mean prices across all camera brands: £2,186

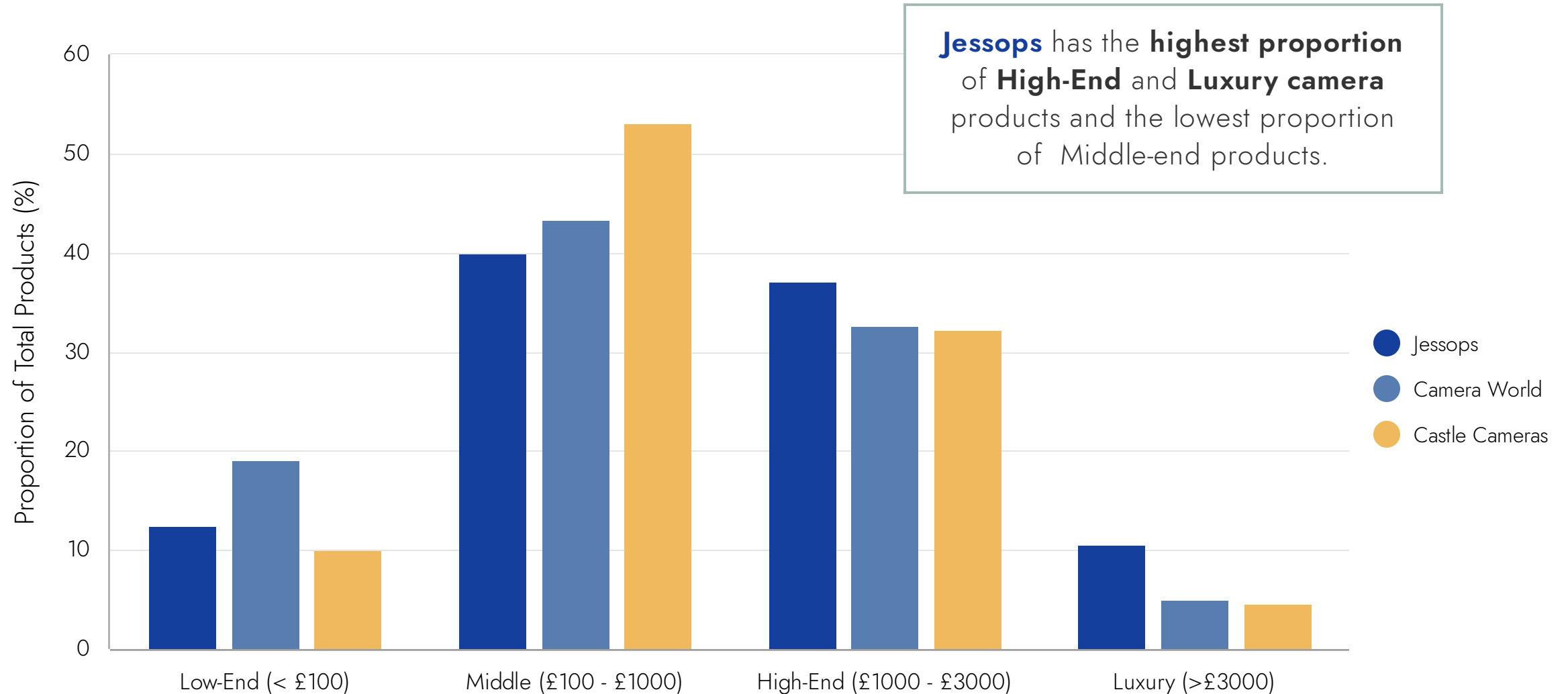
STYLES

- **Mirrorless, Digital, and DSRL** cameras were the most common styles
- DSRL and Mirrorless were the most expensive styles
- Single-Use and Film the cheapest
- Range in mean prices across all camera styles: £2,148

OVERVIEW OF COMPETITORS

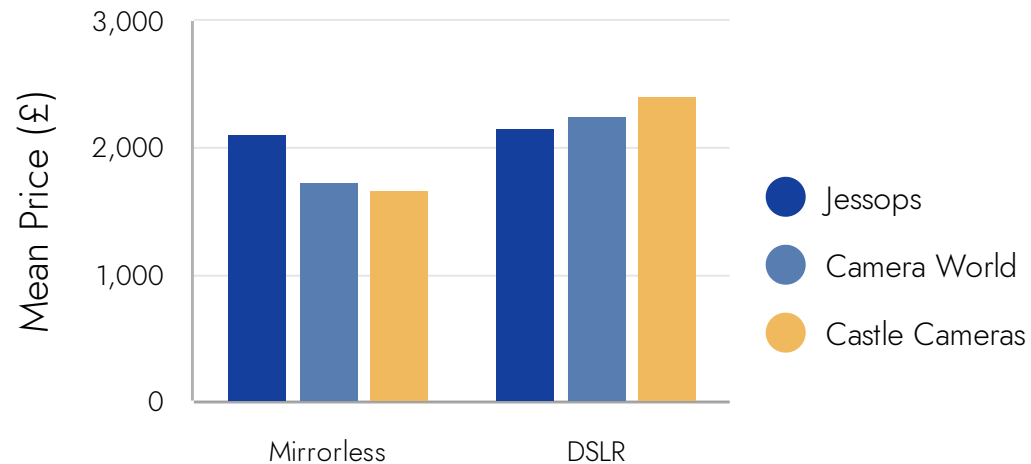
	Jessops	Camera World	Castle Cameras
Unique Products	105	141	130
Price Range	£17 - £6,999	£12 - £7,198	£10 - £6,999
Mean Price	£1,415	£1,106	£1,096
Brand Range	13	20	11
Most Common Brands	Canon, Sony, Nikon	Sony, Panasonic, Canon	Canon, Fujifilm, Panasonic
Most Expensive Brand	Nikon	Nikon	Nikon
Cheapest Brand	Illford	Agfaphoto	Kodak
Style Range	8	9	7
Most Common Styles	Mirrorless, Digital, DSLR	Mirrorless, Compact, DSLR	Mirrorless, Digital, DSLR
Most Expensive Styles	Mirrorless, DSLR	Mirrorless, DSLR	Mirrorless, DSLR

PRODUCT FOCUS



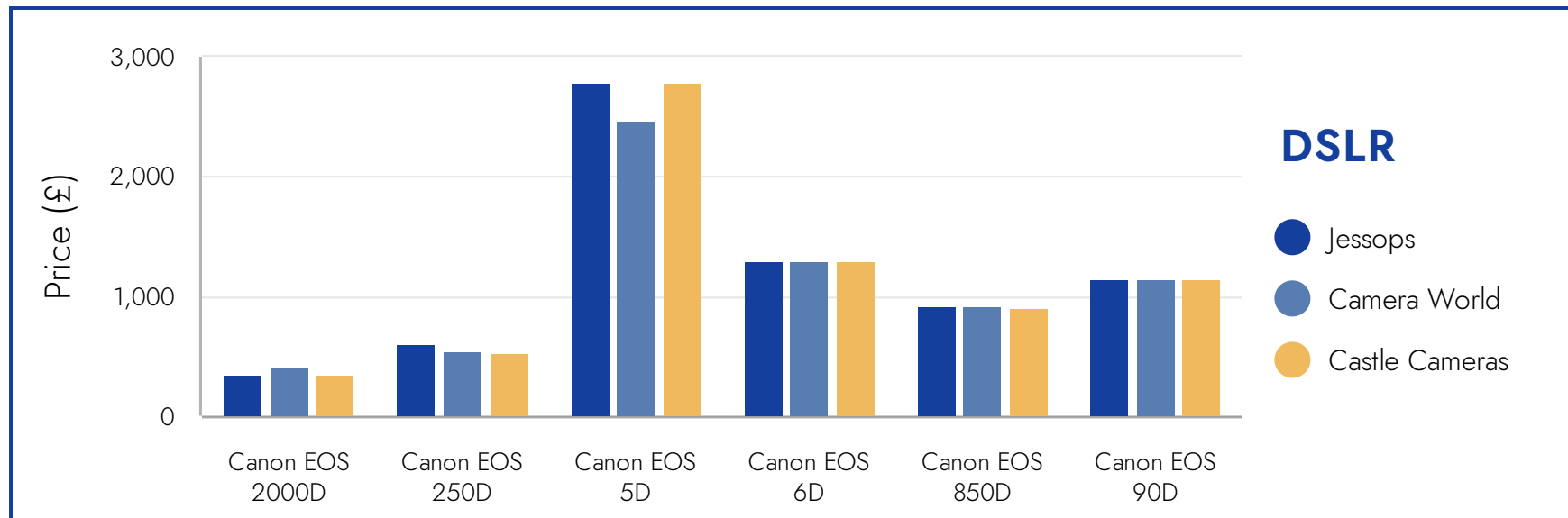
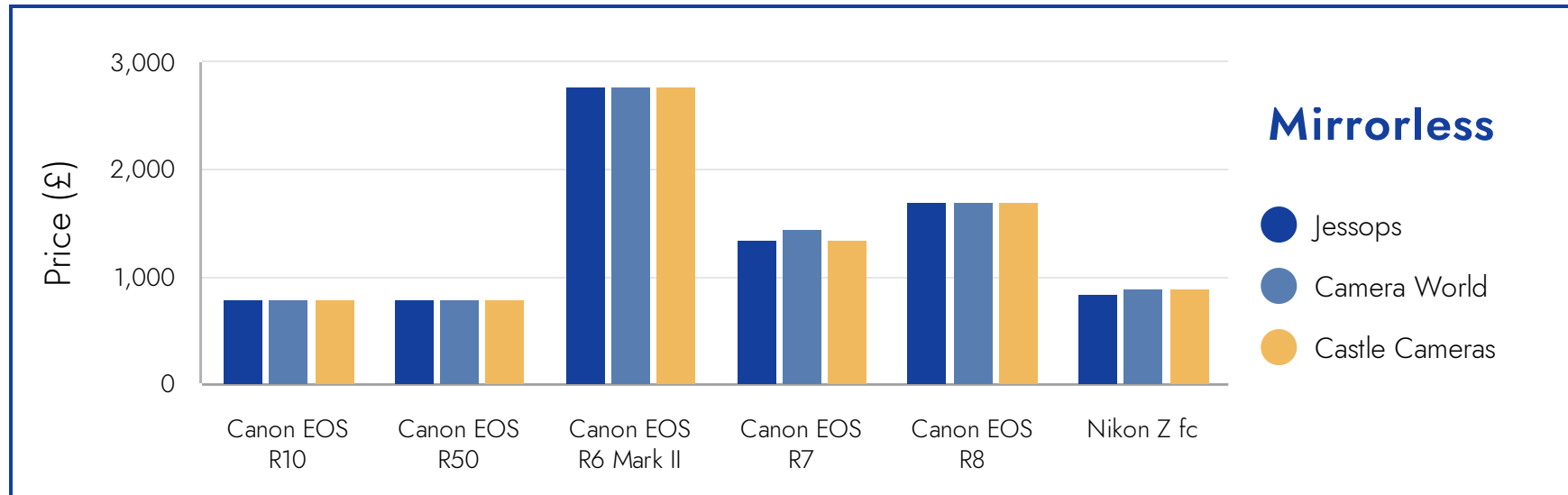
MIRRORLESS & DSLR CAMERAS

- **Most expensive styles** for all three sites
- On average, Mirrorless cheapest at Castle.
- On average, DSLR cheapest at Jessops

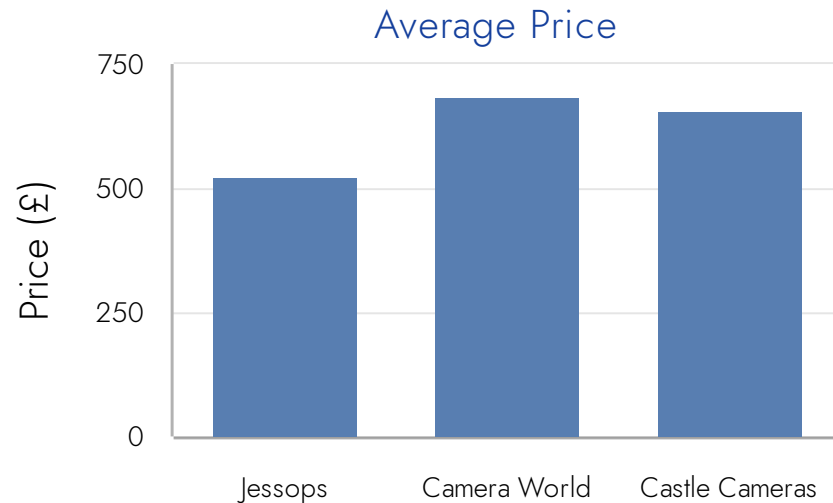
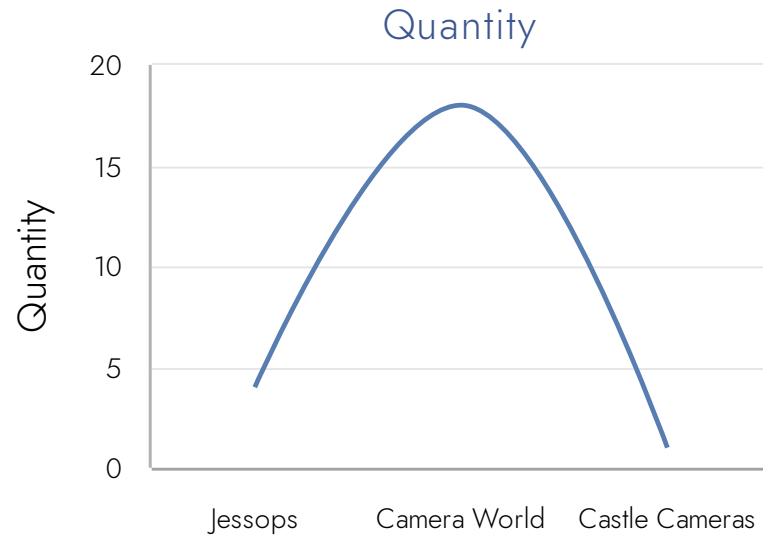


- Product comparison analysis indicated:
- **No consistent price differences** across the competitors sites
- Each site seems to have several "special price" offers (~ £50 - £200 discounts)
- Otherwise, **prices match +/- £5** for same DSLR/Mirrorless camera bodies.
- All sites have 45-48 unique ML products
- Each site carries 11-15 DSLR products

DIRECT PRODUCT COMPARISONS



COMPACT CAMERAS



- On average, **cheapest at Jessops** (£524) and most expensive at Camera World (£687)
- Only **Camera World** sells a **considerable range** of compact cameras (18 products) out of all competitors
- Camera World focuses on Panasonic, Ricoh, and Sony Digital Compact cameras
- Many cameras may be compact but not explicitly labeled as such - making comparisons hard
- Only one compact camera body sold by more than one site - £8 more expensive at Jessops than Castle



SUMMARY

On average, Jessops seems more expensive than the competition

But there is a difference in product focus:

- Jessops focuses more on high-end and luxury cameras
 - Camera World and Castle Cameras carry more middle- and lower-end products
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For Mirrorless and DSLR cameras, stick with Jessops

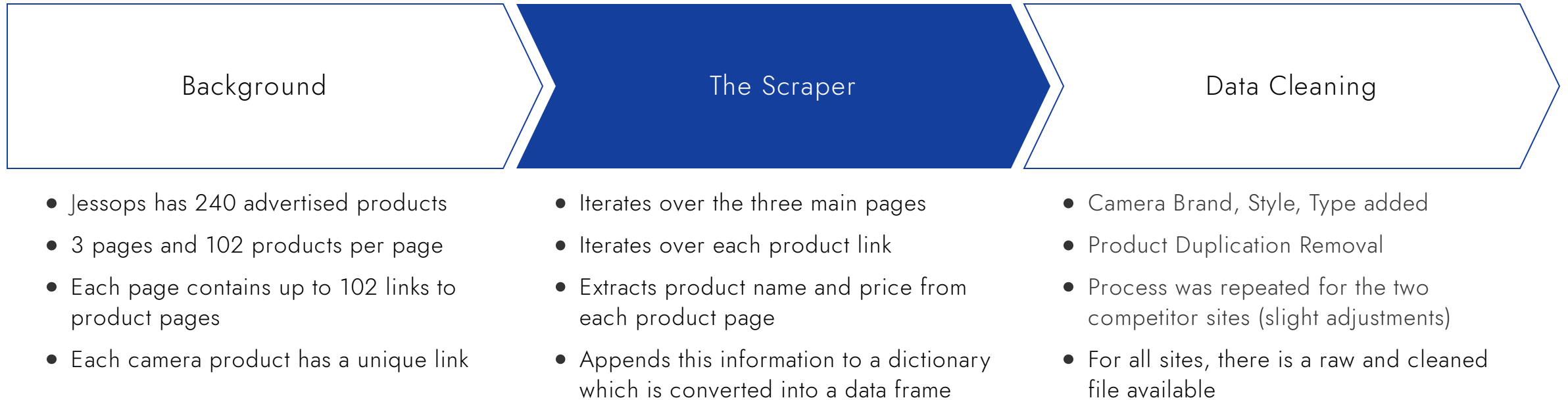
- No competitor site offer consistently better prices than Jessops
 - Product range is extremely comparable across all three sellers
 - Top tip: Choose model first, then check for special discounts on each site!
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For compact cameras, head to Camera World for the largest selection



TECHNICAL DETAILS

TECHNICAL WALK-THROUGH



PRODUCT DUPLICATES

The Problem

Canon EOS 2000D DSLR Camera Body	~£349.00
Canon EOS 2000D DSLR Camera with 18-55mm IS II Lens	~£449.00
Canon EOS 250D DSLR Camera Body	~£529.00
Canon EOS 250D DSLR Camera, black with 18-55mm IS STM Lens	~£649.00
Canon EOS 250D DSLR Camera, white with silver 18-55mm IS STM Lens	~£649.00
Canon EOS 250D Vlogger Kit 18-55mm Lens, 32GB SD card, Joby Tripod, etc.	~£799.00
Canon EOS 5D Mark IV DSLR Camera	~£2,789.00
Canon EOS 6D Mark II DSLR Camera	~£1,299.00
Canon EOS 850D DSLR Camera Body	~£899.00
Canon EOS 850D DSLR Camera with 18-135mm f3.5-5.6 IS USM Lens	~£1,279.00
Canon EOS 850D DSLR Camera with 18-55mm f4-5.6 IS STM Lens	~£929.00
Canon EOS 90D DSLR Camera Body	~£1,149.00
Canon EOS 90D DSLR Camera with EF-S 18-135mm IS USM Lens	~£1,549.00
Canon EOS M50 Mark II Body Only	~£579.00
Canon EOS M50 Mark II Camera with 15-45mm lens, Black	~£679.00
Canon EOS M50 Mark II Camera with 15-45mm lens, White	~£679.00
Canon EOS M50 Mark II Camera with 18-150mm lens, Black	~£929.00
Canon EOS M6 Mark II Mirrorless Camera Body, Black	~£799.00
Canon EOS M6 Mark II Mirrorless Camera, Black with EF-M 15-45mm Lens	~£1,099.00



The Solution

Canon EOS 2000D DSLR Camera Body	349
Canon EOS 250D DSLR Camera Body	529
Canon EOS 5D Mark IV DSLR Camera	2789
Canon EOS 6D Mark II DSLR Camera	1299
Canon EOS 850D DSLR Camera Body	899
Canon EOS 90D DSLR Camera Body	1149
Canon EOS M50 Mark II Body Only	579
Canon EOS M6 Mark II Mirrorless Camera Body, Black	799

Use Fuzzy Matching to:

- 1 Only keep the camera body products
- 2 Only keep one colour of every product

This allows to get true sense of product range!

- 1 Exact same product offered in different colours
- 2 Same product offered in different versions