

UK Sourcing Survey

Preliminary results

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Matthias Holweg, Cambridge

Yung Tran, SMMT

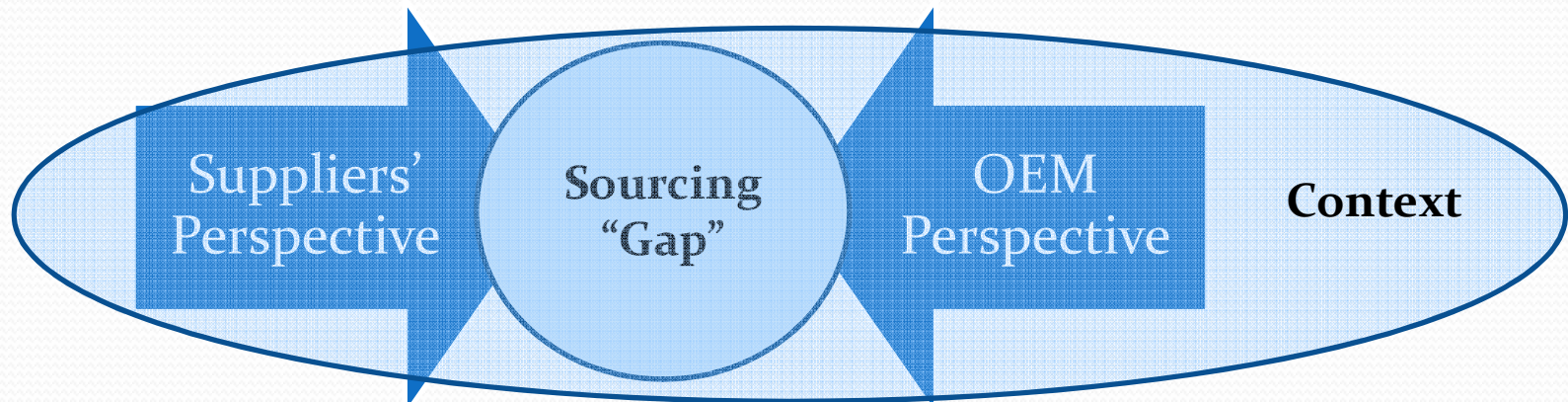
Mike Tickle, PA Consulting

Phil Davies, BIS

Lawrence Davies, GM Europe

A “Sourcing Roadmap”

- NAIGT identified supply chain “hollowing out”
 - A sourcing “roadmap” to generate actionable insights:
 - Assessment of scope to influence sourcing decisions that affect the UK auto industry
 - Identification of components with greatest potential for retaining /building supply chain capabilities in the UK
- Why are UK suppliers **not** awarded the business?



OEM Survey

Descriptive statistics

Scale

- Total purchasing spend: £7,416 million
 - UK spend accounts for 1-83% of global spend, with a mean of 36%
- Components account for an average of 65%, raw materials for 6%

Q1. What is your company's current annual purchasing spend (in £m)?

	Total	Min	Max	Mean	N
Annual purchasing spend in the UK (in £m)	7,416	59	2,500	742	10
Annual purchasing spend worldwide (in £m)	65,808	278	39,000	6,581	10
UK spend in percent of worldwide spend	11%	1%	83%	36%	10

Scope

- Where are the decisions being made?
 - UK operations have certain scope, but decisions considered at group level
 - Bi-polar response on where final purchasing decision is made
- Degree of new suppliers
 - Range: 0.5% to 10%, mean 4% per annum
 - Bias towards existing, large suppliers with global footprint, but some openness
- Outlook for UK sourcing: not unanimous yet overall predicted increase
- Lower than expected role of currency exchange and unit cost

#	Question	N	Mean
1	Our UK-sourced purchasing volume is likely to increase in the next five years	11	0.55
2	It is our strategic intent to increase sourcing from within the UK	11	0.73
3	We have little influence over supplier selection as this is done outside of the UK	11	-1.00
4	Our UK suppliers are largely subsidiaries of global supplier groups	11	1.09
5	When put out a call for a new component, we receive competitive bids from UK suppliers	11	-0.27
6	We largely source from suppliers with a global footprint that can serve all our manufacturing facilities, not just the UK	11	0.45

Scope II

#	Question	Strongly Disagree	Somewhat Disagree	Ambivalent	Somewhat Agree	Strongly Agree	N	Mean	CI ¹ (±)
1	The sourcing decisions are unique to each assembly plant	4	3	1	2	1	11	-0.64	0.85
2	The decision where to source from rests within our UK operation	5	1	0	2	3	11	-0.27	1.09
3	Our sourcing strategy is determined for the entire group, not just for a single country or region	0	1	0	5	5	11	1.27	0.53
4	We have to source from preferred suppliers prescribed by our headquarters	3	4	0	4	0	11	-0.55	0.76
5	Our sourcing process is open to new suppliers	0	1	0	5	5	11	1.27	0.53
6	By default, we tend to look for suppliers from within our pool of established suppliers	0	0	1	10	0	11	0.91	0.18
7	Currency exchange rates have a strong influence on our sourcing strategy, even in the short-term	3	1	1	5	1	11	0.00	0.87
8	Unit cost is the key deciding factor in whether or not a supplier contract is awarded	1	3	0	6	1	11	0.27	0.75

¹ – 95% confidence interval

Current UK sourcing

what OEMs are sourcing in the UK

Reasons for sourcing from UK, by rank:

- Lowest logistics cost (32)
- Need for configuration close to plant (27)
- Lowest unit cost (27)
- Highest quality (15)
- Vehicle only made in UK (15)
- Unique supplier capabilities (10)
- Company policy to source in the UK (7)

#	Components	UK sourced	Single source	in-house supplier	Approx. annual volumes	Expected volume change -/+
		Mean	Mean	Mean	Mean	Mean
17	Fuel tanks	0.91	0.45	0.09	248,667	0.45
1	Engine components	0.80	0.30	0.00	284,500	0.55
12	Headliners	0.73	0.36	0.00	248,500	0.45
29	Adhesives and sealers	0.73	0.30	0.00	378,667	0.45
28	Small plastics parts/fasteners	0.73	0.27	0.00	10,252,200	0.45
14	Interior trim	0.73	0.09	0.00	1,718,833	0.45
7	Spoilers and body cladding	0.70	0.30	0.00	117,000	0.50
13	Carpets	0.64	0.45	0.00	3,381,833	0.45
9	Seats	0.64	0.36	0.13	918,833	0.45
6	Bumpers	0.60	0.55	0.30	4,046,167	0.56
5	Panels	0.60	0.22	0.29	898,714	0.56
4	Castings	0.56	0.22	0.11	1,504,600	0.50
10	Instrument panels	0.55	0.50	0.22	248,500	0.50
8	Glass	0.50	0.20	0.00	1,227,833	0.40
27	Nuts, bolts, screws	0.50	0.20	0.00	20,252,200	0.50
11	HVAC units	0.45	0.55	0.09	248,000	0.45
16	Suspensions (struts)	0.27	0.36	0.10	881,167	0.45
3	Forgings	0.22	0.33	0.00	1,104,600	0.60
21	Engine control unit (ECU)	0.20	0.50	0.11	248,500	0.50
2	Transmission components	0.20	0.30	0.13	294,500	0.45
26	Power steering	0.18	0.27	0.10	244,500	0.36
19	Tyres	0.18	0.00	0.00	895,500	0.45
24	Alternators	0.09	0.45	0.00	248,500	0.45
20	Anti-lock brakes (ABS)	0.00	0.40	0.00	877,833	0.40
18	Wheels	0.00	0.36	0.00	895,500	0.45
25	Harnesses	0.00	0.36	0.00	1,734,833	0.45
22	Entertainment / radio systems	0.00	0.33	0.00	247,167	0.50
15	Brakes (discs, drums)	0.00	0.27	0.00	886,833	0.45
23	Batteries	0.00	0.27	0.00	249,500	0.45

Reasons for *not* sourcing from the UK

Components	Unit cost was not competitive	Quality was not competitive	Delivery/ logistics was not competitive	Volumes/ supplier capacity was insufficient	Lack of accredited suppliers in the UK	The sourcing decision was taken abroad	Required raw materials not available	Required materials processing capabilities not available	Other (please specify)
Powertrain	4	1	2	1	5	0	1	3	a)
Exterior	5	2	3	0	3	0	0	1	a), b)
Interior	3	2	2	0	2	0	0	1	a), b)
Chassis	5	2	2	1	5	1	2	4	
Electronics	7	3	2	3	8	1	1	3	a), b)
Electrical	7	4	1	3	8	1	1	3	a)
Consumables	3	0	1	0	1	1	1	2	
Total	34	14	13	8	32	4	6	17	

Other (please specify)

a) Required technical capability not available

b) Built into Cab assembled outside the UK

Prospective UK sourcing:

what OEMs would

the UK

Heavy metal: forgings,
castings, large pressings:
1 m units

Electric powertrains parts:

- Charging technology, reducers, invertors: 100,000 units
- Large electric motors: 100,000 units
- Batteries: 56,000 units

Large ext. mouldings
(mirrors, bumpers): 0.5 m
units

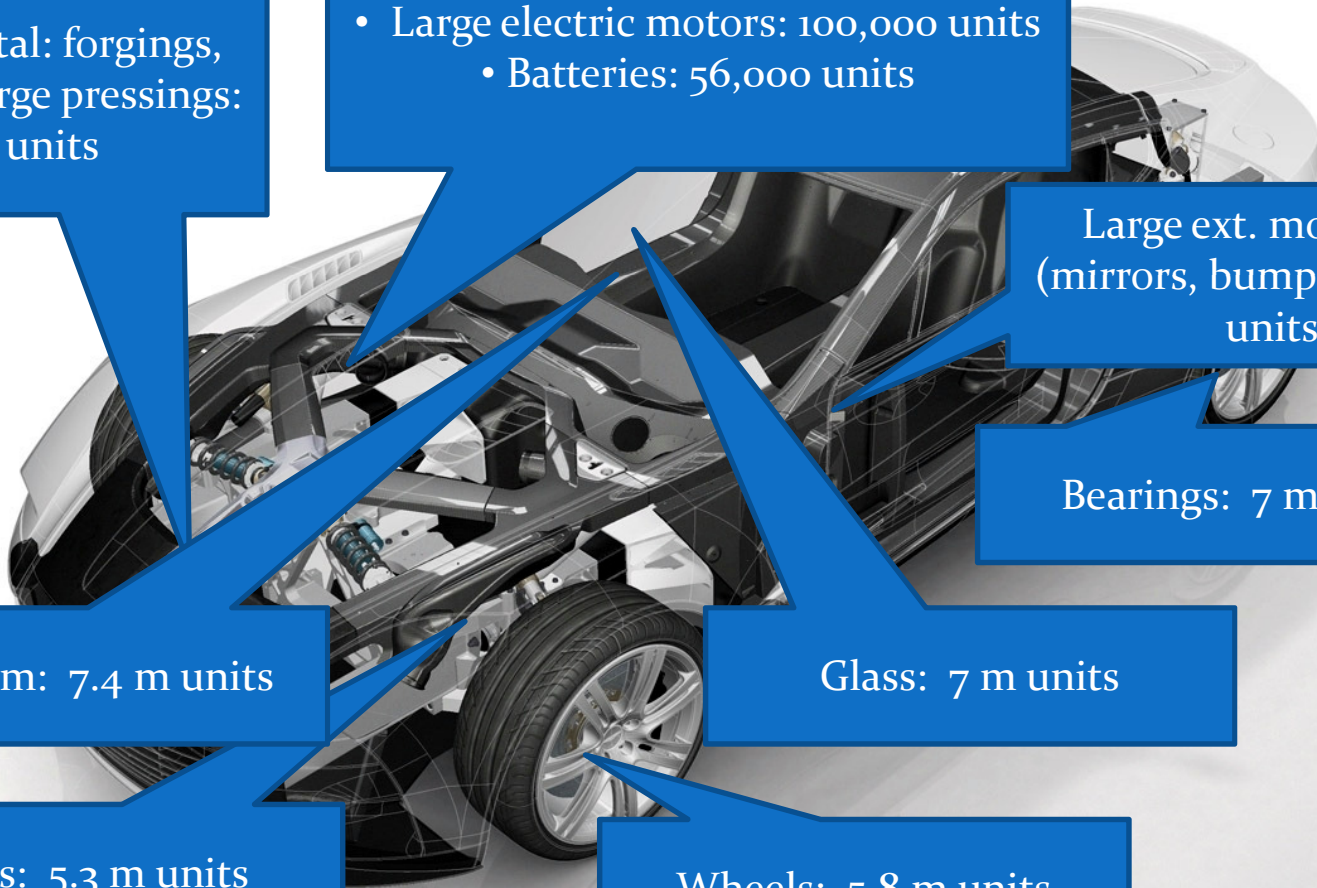
Bearings: 7 m units

Glass: 7 m units

Wheels: 5.8 m units

Struts: 5.3 m units

Interior trim: 7.4 m units



Greatest potential

Part / Material	volumes	co-location
Hot Stampings	200000	0
Forgings	250000	0.5
Castings	250000	0.5
Frames	12000	0.5
seat frames (2nd tier)	250000	0
Large Electric Motors	100000	0
powertrain	100000	0
Shock Absorbers	5000000	0
Dampers	250000	0.5
Mirrors	250000	0.5
exterior painted mouldings (mirror caps, spoiler)	250000	0
Harnesses	6000	0
Charging Technologies	50000	0
Reduceses and Invertors	50000	0
Batteries	6000	0
Batteries	50000	0
Wheels	5000000	0
Alloy Wheels	600000	0.5
Alloy Wheels	200000	0
Glass	6000	0
Glass	7000000	0
Bumpers	6000	0.5
soft top	50000	0.5
Interior trim	5000000	0
Sunvisors	2400000	0
Bearings	5000000	0
All	100000	0.5

Greatest potential II

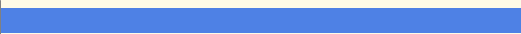

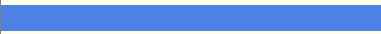

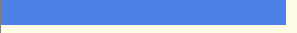




- Pooled purchasing: a potential option to increase volume?

#	Question	Never	Unlikely	Maybe	Likely	Definitely	Responses	Mean	CI ¹ (±)
1	Powertrain	1	2	3	4	1	11	0.18	0.69
2	Exterior	2	2	3	3	1	11	-0.09	0.77
3	Interior	2	3	1	5	0	11	-0.18	0.74
4	Chassis	1	1	5	2	2	11	0.27	0.70
5	Electronics	1	5	1	3	1	11	-0.18	0.74
6	Electrical	1	4	2	3	1	11	-0.09	0.72
7	Consumables	0	0	5	2	4	11	0.91	0.56
8	Raw Materials	1	1	2	3	4	11	0.73	0.80
9	Energy	1	1	3	4	2	11	0.45	0.72

¹ – 95% confidence interval

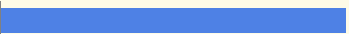



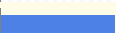
- Which components are considered most suitable?
 - Castings, forgings

What factors matter when awarding new supply contracts? (in addition to unit cost)

#	Answer		Response	%
3	Logistics cost to assembly plant		11	100%
1	Labour cost		8	73%
5	Taxes and tariffs		8	73%
6	Cost related to quality control		7	64%
7	Currency risk		6	55%
8	Other (see below)		4	36%
2	Labour cost inflation		4	36%
4	Transportation cost inflation/volatility		4	36%
9	Proximity to raw materials		2	18%

- Also important: technology, accreditation

How new suppliers are found

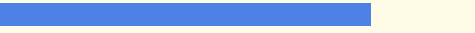



#	Answer		Response	%
1	Internal directory		6	67%
2	External directory		6	67%
5	Other (see below)		4	44%
3	Regional Development Agency		2	22%
4	Supplier fairs		2	22%

Other (please specify)
Market information
Internet
Networking & know-how
Buyer experience and knowledge

- External directories matter, supplier fairs are less used at present

Non-production purchasing

- Overall £104 million per annum

#	Answer		Response	%
2	Machinery and equipment		7	78%
4	Assembly lines / equipment		6	67%
3	Tooling		6	67%
1	Robots		4	44%

	Offer not competitive in terms of price	Offer not competitive in specification / technology	No UK suppliers available in this field	We have a long-standing relationship with foreign suppliers	Our headquarters specifies these supplier (not a local UK decision)	Other
Robots	3	4	3	1	3	
Machinery	4	2	2	1	3	
Tooling	6	2	4	1	1	
Assembly lines / equipments	3	4	2	1	4	1st Tier supplier responsible for the procurement of tooling
Total	16	12	11	4	11	



Future development/potential

- Model cycle charts
 - Results not representative
- New powertrain technologies
 - Results not representative

Alternative powertrain vehicles, available *now*

	Year	Engine start-stop autom.	Brake energy rec.	E-motor support	Full e-mobility	CO ₂ g/km
Smart For Two mhd	2007	Y	N	N	N	116
Honda CR-Z	2010	Y	Y	Y	N	117
Toyota Prius III	1997	Y	Y	Y	Y	121
Honda Insight II	1999	Y	Y	Y	N	142
Honda Civic Hybrid II	2001	Y	Y	Y	N	149
VW Golf 1.4	2008	N	N	N	N	149
Lexus RX 450h	2009	Y	Y	Y	Y	193
VW Touareg Hybrid	2010	Y	Y	Y	Y	193
Lexus GS 450h	2006	Y	Y	Y	Y	220
Mercedes S 400 Hybrid	2009	Y	Y	Y	N	256
Lexus LS600h L	2006	Y	Y	Y	Y	301
BMW Active Hybrid X6	2010	Y	Y	Y	Y	315
Range Rover Sport V8	2005	N	N	N	N	348

Introduction 2011 and beyond:

Opel Ampera (HEV), Nissan Leaf (EV), Lexus CT200h, Toyota Auris Hybrid, BMW ActiveHybrid 5, Porsche Cayenne S Hybrid, Mercedes E300 BlueTec Hybrid (109 g/km)



Points for discussion

- Main advantage for UK suppliers is ***proximity*** (69%)
 - lower logistics cost, configuration of parts, UK specific vehicle
- Three main clusters of opportunity seem to be emerging:
 1. “heavy metal”: casting, forging, pressings, wheels, bearings
 2. “electric power-train” parts: batteries, motors, inverters
 3. “classic” parts: trim, mouldings, struts, glass
- Three clusters -- three very different strategies
- Need to validate findings with suppliers
 - What do they consider as their competitive edge?
 - Why is business not being awarded to UK firms?
 - What are the constraints in tiers 2 and 3 of the supply chain?

Supplier Survey

tbc by September 2010