ANANDRATHI

India I Equities

Consumer Durables

Initiating Coverage

17 December 2019

Dixon Technologies (India)

Make-in-India, with size and scale aiding import substitution; Buy

Rating: **Buy**
Target Price: ₹5,822
Share Price: ₹3,552

Ideally placed to cater to mounting demand across multiple categories in the rapidly growing Indian consumer durables sector, Dixon's scale and size give it an edge. It has the largest manufacturing plants in India for LED TVs, LED bulbs and washing machines. Among the top-five globally with manufacturing capabilities for LED bulbs, its export capabilities are on the threshold of exciting opportunities, aided possibly by one of its customers with global operations. Besides, its original design and manufacturing (ODM) solutions based on R&D across many product categories should help keep it in the forefront of innovation across product categories.

No hindrances to aspirational demand; favourable GST rates in place. With robust aspirational demand in India, customs-duty structures being inverted to support Make-in-India, and GST rates rationalised, Dixon's growth seems to be aligned with strategic steps. Further reduction in GST rates would eventually result in deeper penetration. Also, shortening replacement cycles across product categories would help to raise volumes.

India emerging as credible alternative to China. With manufacturing operations in India ramping up, established domestic and global brands in India are looking at lowering imports (partially/fully) in a phased manner. This would help in adding clients and ramping up volumes in existing/forthcoming product categories. India also fits perfectly in the global supply chain of MNC giants, which are looking at reducing their manufacturing operations in China amid its trade war with the USA.

Valuation and Outlook. We initiate coverage on Dixon Technologies, with a Buy recommendation and a target of ₹5,822 (25x FY22e EPS of ₹233) as we model 24% and 32% CAGRs over FY20-22 in respectively revenue and PAT, resulting in the RoCE expanding from 26% in FY19 to ~36% in FY21 and FY22.

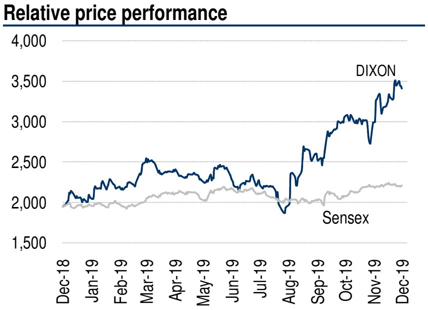
Key financials (YE Mar)	FY18	FY19	FY20e	FY21e	FY22e
Sales (₹m)	28,416	29,845	48,765	61,434	75,345
Net profit (₹m)	609	634	1,512	1,963	2,639
EPS (₹)	53.8	55.9	133.5	173.3	232.9
PE (x)	61.0	43.1	26.6	20.5	15.3
EV / EBITDA (x)	32.8	20.9	15.8	12.6	10.0
PBV (x)	11.8	7.2	7.7	5.6	4.1
RoE (%)	23.8	18.3	33.4	31.6	31.1
RoCE (%)	33.9	26.7	37.3	35.5	36.6
Dividend yield (%)	0.1	0.1	0.1	0.1	0.1
Net debt/equity (x)	0.1	0.4	0.4	0.3	0.1

Source: Company

Key data	DIXON IN / DIXO.BO
52-week high / low	₹3642 / 1560
Sensex / Nifty	41352 / 12165
3-m average volume	$2m
Market cap	₹41bn / $578.5m
Shares outstanding	12m

Shareholding pattern (%)	Sep'19	Jun'19	Mar '19
Promoters	38.9	38.9	38.9
- of which, Pledged	-	-	-
Free float	61.1	61.1	61.1
- Foreign institutions	7.7	7.2	6.0
- Domestic institutions	22.1	22.4	23.8
- Public	31.4	31.5	31.3

Relative price performance



Source: Bloomberg

Nirav Vasa
Research Analyst

Surbhi Lodha
Research Analyst

Quick Glance – Financials and Valuations

Fig 1 – Income statement (₹ m)

Year-end: Mar	FY18	FY19	FY20e	FY21e	FY22e
Net revenues	28,416	29,845	48,765	61,434	75,345
Growth (%)	***15.7***	***5.0***	***63.4***	***26.0***	***22.6***
Direct costs	24,870	26,093	42,669	53,693	65,776
SG&A	2,419	2,403	3,452	4,471	5,586
EBITDA	**1,127**	**1,349**	**2,643**	**3,270**	**3,983**
EBITDA margins (%)	*4.0*	*4.5*	*5.4*	*5.3*	*5.3*
- Depreciation	152	217	331	375	397
Other income	42	56	64	66	68
Interest expenses	135	250	360	343	136
PBT	882	938	2,016	2,618	3,518
Effective tax rate (%)	*31.0*	*32.5*	*25.0*	*25.0*	*25.0*
+ Associates / (Minorities)	-	-	-	-	-
Net Income	609	634	1,512	1,963	2,639
Adjusted income	609	634	1,512	1,963	2,639
WANS	11	11	11	11	11
FDEPS (₹ / sh)	53.8	55.9	133.5	173.3	232.9
FDEPS growth (%)	*16.5*	*4.0*	*138.7*	*29.8*	*34.4*
Gross margins (%)	*12.5*	*12.6*	*12.5*	*12.6*	*12.7*

Fig 2 – Balance sheet (₹ m)

Year-end: Mar	FY18	FY19	FY20e	FY21e	FY22e
Share capital	113	113	113	113	113
Net worth	3,150	3,782	5,260	7,183	9,781
Debt	406	1,361	1,999	1,904	753
Minority interest	-	-	-	-	-
DTL / (Assets)	41	160	165	165	165
Capital employed	**3,597**	**6,887**	**7,425**	**9,252**	**10,699**
Net tangible assets	1,788	2,362	2,762	3,162	3,362
Net intangible assets	36	47	50	50	50
Goodwill	-	-	-	-	-
CWIP (tang. & intang.)	125	188	200	200	200
Investments (strategic)	111	76	80	80	80
Investments (financial)	-	-	-	-	-
Current assets (ex cash)	7,153	11,884	16,791	21,056	25,738
Cash	441	367	482	919	1,079
Current liabilities	6,058	8,038	12,936	16,210	19,805
Working capital	1,095	3,847	3,855	4,846	5,933
Capital deployed	**3,597**	**6,887**	**7,425**	**9,252**	**10,699**
Contingent liabilities	22	21	-	-	-

Fig 3 – Cash-flow statement (₹ m)

Year-end: Mar	FY18	FY19	FY20e	FY21e	FY22e
PBT (adj. for OI and int.)	975	1,132	2,312	2,895	3,586
+ Non-cash items	152	217	331	375	397
Oper. prof. before WC	1,127	1,349	2,643	3,270	3,983
- Incr. / (decr.) in WC	-235	-1,152	-1,586	-990	-1,088
Others incl. taxes	-273	-305	-504	-654	-880
Operating cash-flow	618	-108	554	1,625	2,016
- Capex (tang. + intang.)	-716	-864	-746	-775	-597
Free cash-flow	-98	-971	-193	850	1,419
Acquisitions					
- Div. (incl. buyback & taxes)	-23	-23	-28	-34	-34
+ Equity raised	3	0	-	-	-
+ Debt raised	-23	954	639	-95	-1,151
- Fin investments	-111	35	-4	-	-
- Misc. (CFI + CFF)	540	-69	-298	-284	-74
Net cash-flow	288	-74	115	437	159

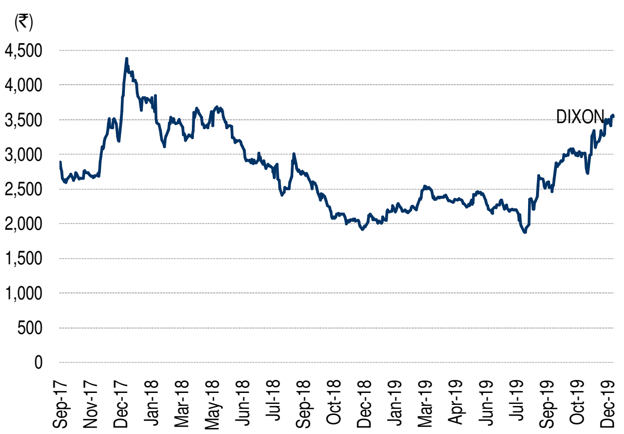
Source: Company

Fig 4 – Ratio analysis

Year-end: Mar	FY18	FY19	FY20e	FY21e	FY22e
P/E (x)	61.0	43.1	26.6	20.5	15.3
EV / EBITDA (x)	32.8	20.9	15.8	12.6	10.0
EV / Sales (x)	1.3	0.9	0.9	0.7	0.5
P/B (x)	11.8	7.2	7.7	5.6	4.1
RoE (%)	23.8	18.3	33.4	31.6	31.1
RoCE (%) - after tax	33.9	26.7	37.3	35.5	36.6
ROIC	26.0	16.6	26.5	29.1	30.5
DPS (₹ / sh)	2.0	2.0	2.5	3.0	3.0
Dividend yield (%)	0.1	0.1	0.1	0.1	0.1
Dividend payout (%) - incl. DDT	3.7	3.6	1.9	1.7	1.3
Net debt / equity (x)	0.1	0.4	0.4	0.3	0.1
Receivables (days)	38	63	63	63	63
Inventory (days)	41	50	50	50	50
Payables (days)	66	90	90	90	90
CFO : PAT %	101.5	-17.0	36.6	82.8	76.4

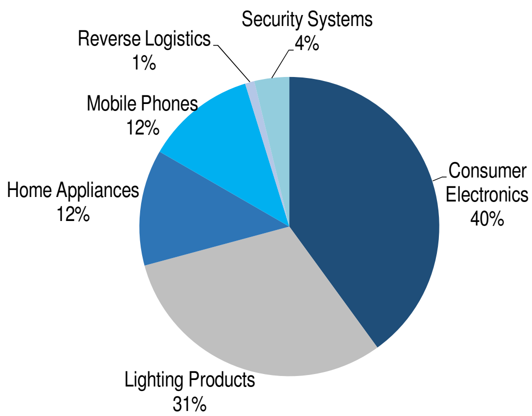
Source: Company

Fig 5 – Price movement



Source: Bloomberg

Fig 6 – FY19 gross revenue mix



Source: Company

Personifies "Make in India"

Manufacturing size and scale able to cater to huge domestic market: Starting in 1994 with assembling colour television sets, Dixon has been expanding its product basket regularly. Scale and size have been primary drivers in it establishing its manufacturing footprint in India, giving it an edge over others.

With its manufacturing base set-up, it is able to (a) cater to 25% of the domestic television market, (b) supply up to 30% of the domestic washing-machine market, (c) meet up to 60% of the LED bulb market in India. Its addressable market for all these categories could be ~ ₹350bn, with potential for exports as well. This is now being negotiated and is expected to take off from CY20, supported by some of its customers which operate in many continents and are re-aligning their supply chain to market requirements.

Fig 7 – Manufacturing footprint developed, all-India

Product	Location	Installed capacity (m/a)	Comments
LED TVs	Andhra Pradesh	3.6	Largest TV assembly plant in India
Washing machines	Uttarakhand	1.2	Largest washing machine assembly plant in India
LED bulbs	Noida	240	Largest bulb assembly plant in India
CCTV cameras	Andhra Pradesh	8.4	
Digital video recorders	Andhra Pradesh	1.8	

Source: Company

Fig 8 – Major brands in each product segment

Product	Major brands catered
LED TVs	Xiaomi, Philips, Panasonic, Lloyd, Marquee, Koryo, BPL
Washing machines	Lloyd, Samsung
LED bulbs	Syska, Orient, Philips, Bajaj Electricals, Panasonic, Wipro, Ajanta, Polycab, Usha
Mobile phones	Samsung, Xiaomi, Gionee, Panasonic, Micromax, Mobiistar, Intex

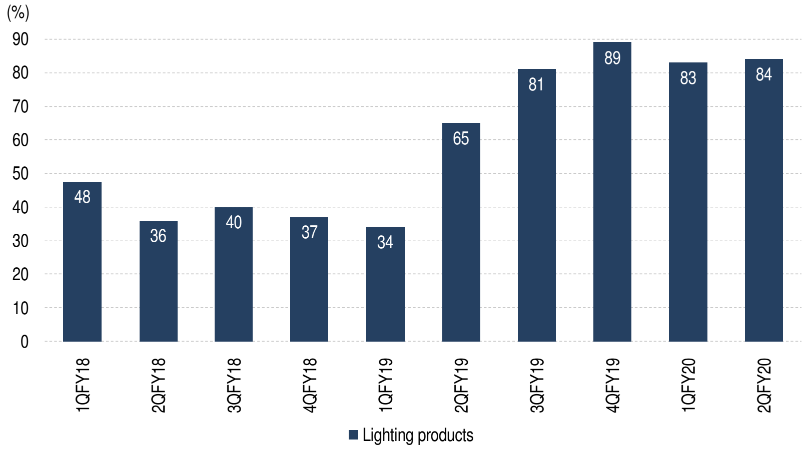
Source: Industry, Anand Rathi Research

Shift to ODM to offer customers value-added solutions: Apart from scale and size, Dixon has moved up the value chain. It is now capable of offering original-design manufacturing (ODM) solutions based on requirements of the Indian market.

It has offered clients (a) 38 models of LED television sets, (b) 6-7 variants of fully-automatic washing machines and up to 170 models of semi-automatic washing machines (the largest market in washing machines in India, 55% by volumes) and (c) more than 2,000 variants of 12-50W LED bulbs to all the major brands in India, barring Havells and Crompton, which have their own manufacturing plants located in India.

The ODM model has been fully successful in washing machines (100% operations on an ODM basis) and has touched ~ 80% in Q2 FY20 in lighting products.

Fig 9 – ODM levels have doubled since FY19



Source: Company

Ability to provide end-to-end solutions cost-effectively: As the focus is on ODM/OEM solutions, Dixon is well placed to provide end-to-end solutions to OEMs across the categories in which it operates. Major elements of end-to-end solution include research and development, global sourcing, PCB assembly, box-building assembly, backward integration and reverse logistics.

For ODM-based products, Dixon can provide end-to-end solutions starting from product profiling to product and material procurement based on customer's projections. Its capabilities to provide OEM/ODM solutions cost-effectively are supported by backward integration and implementation of processes.

Dixon is well placed to deliver cost-effective solutions because of (a) in-house capability for plastic moulds and coil manufacturing, (b) experience in large scale operations, (c) backward-integrated manufacturing facilities, (d) global sourcing and processes, and e) availability of skilled and unskilled labour across manufacturing facilities.

Dixon has also implemented thorough pre-manufacturing checks and balances, which prevent unnecessary defects and ensure resources are not wasted. Because of these processes, it has received ISO 9001:2008 and ISO 14001:2004 certifications.

Fig 10 – Dixon's capabilities across each step in its quest for provide end-to-end solutions

Research and Development	Dixon has set up an R&D centre focusing on research and development of electronics hardware designing, systems architecture, mechanical design, component engineering and optics design and provide design enhancement and verification for its customers. The R&D team has capabilities to verify and develop conceptual designs received from customers and convert such designs into deliverable products by improving the designs, recommending suitable raw materials and testing of trial products. The R&D team looks for innovative solutions to manufacturing efficiency in existing products, reducing production costs and assisting customers in designing consumer durable and lighting products by providing design and engineering support
Global sourcing	Well-established relations with domestic and international suppliers and gained expertise in global procurement of components which meet strict quality standards
Box building assembly	Its scope of work in this category includes (a) sub-assembly equipment, (b) power-up facilities, (c) flexible assembly ability, (d) assembly lines and (e) product testing
PCB assembly	Capabilities in PCB assembly include SMT, through hole, BGA & micro BGA, conformal coating, programming, ICT tests, functional tests, box building and packing
Backward integration	Gradually backward integrated, it is now capable of manufacturing plastic moulding and sheet metal for lighting products, LED TVs, washing machines, wound components for lighting products, backlight unit clean room for LED TVs
Reverse logistics	To maintain relationships with leading OEMs, it started reverse logistics, where it repairs and refurbishes LED panels and mobile phones

Source: Company

Fig 11 – Major initiatives undertaken under ODM business model

Identification	Product profiles of customer reviewed
	Products developed / identified based on customer's needs
	Agreement to develop products after discussing various proposals with customers
Design & Development	Product designed and developed based on customer's requirements
	R&D, quality, production and procurement teams collaborate to develop products
Quality control & testing	Developed product is tested for quality internally
	Product sent to third-party lab for testing
	Product sent to customer for testing and approval
Field trials and demand projection	Trial lot produced for field testing
	Fine-tuning, if any, done at this stage
	Once customer approves, quality estimates are arrived
Production planning	Production & material procurement plan made based on customer's projections

Source: Company

Make in India, supported by higher customs duty, lower GST rates: The government's emphasis on Make in India is supported by higher customs duty on imports of finished products especially of white goods, further aided by lower GST rates, resulting in domestic manufacture of electronic goods seeing a 25% CAGR over FY15–19. Importantly, growth product categories such as mobile phones have reported 74% y/y growth.

Fig 12 – Higher customs duty to support Make-in-India, %

Product	Customs duty	GST rates
LED TVs	36	18
Washing machines	20	18
LED bulbs	30	12
CCTV cameras	30	18
Mobile phones	20	12

Source: Industry, Anand Rathi Research

Fig 13 – Aided by supportive duty structure, Make-in-India is picking up

(₹ bn)	FY15	FY16	FY17	FY18	FY19	CAGR (%)
Consumer electronics	558	558	647	735	770	*8*
Industrial electronics	394	451	622	691	809	*20*
Computer hardware	187	199	204	214	212	*3*
Mobile phones	189	540	900	1320	1700	*73*
Strategic electronics	157	181	208	236	283	*16*
Electronic components	397	454	521	591	677	*14*
LED products	22	51	71	96	130	*56*
Total	**1,904**	**2,433**	**3,173**	**3,883**	**4,580**	***25***

Source: Ministry of Electronics and Information Technology

Fig 14 – How MNC OEMs are ramping up Make-in-India

Brand	Manufacturing initiatives for television sets
Xiaomi	Partnered with Dixon to manufacture television sets in India
TCL	Begins contract manufacturing for TCL and iFFALCON brands in India
LG	Expands its Pune factory for 32" and 40" television sets
Samsung	Has outsourced assembling of washing machines, air-conditioners and mobile phones in India

Source: Industry, Anand Rathi Research

Reverse logistics to aid customer stickiness after becoming important part of supply chain: Dixon also provides reverse logistics services to customers for their Indian operations. Here, it offers repair and refurbishment services. This business segment was started in 2008 with repair services for set-top boxes. In 2019, its reverse logistics business repairs and refurbishes mobile phones, LED television sets and panels, home theatres and computer peripherals for devices such as computer printers, CCTVs and speakers.

The primary intention of setting up this business was to keep customers, as several were unable to develop an all-India after-sales service network. Dixon is also capable of undertaking spare parts management services for mobile phone manufacturers in India because of its backward integration and assembly operations for mobile phones in India. Major components repaired and refurbished in reverse logistics include open cells, backlight units, microprocessors, touch panels, plastic parts and consumables such as paints and thinners.

Never compete with the customer: Despite having one of the largest manufacturing capacities across many product categories, Dixon's focus is on remaining a pure B2B contract manufacturer. Its philosophy of never competing with the customer assures us of (a) it remaining a backward-integrated contract manufacturer and (b) its continuous and improving relations with leading OEMs which are currently its customers.

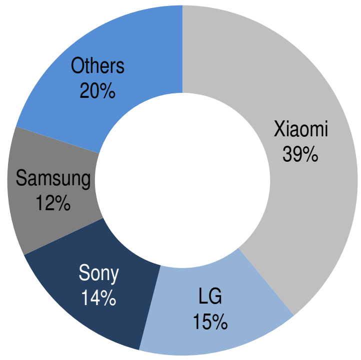
Analysing each business segment

Its consumer electronics (LED TVs) division caters to OEMs which have a ~50% market share in LED TVs: Major products in this category are LED (light-emitting diode) TVs. The capacity for this has been gradually increased from 2.4m units to 3.6m and is expected to increase to 4.8m by Mar'20. Utilising its capacity, Dixon can cater to around one-fourth of the industry's volume requirement, around 14-15m units a year.

This business vertical operates on a prescription mode as there is limited scope for localisation of designs. Since most of the operations in this category are expected to be OEMs' designs, working capital would be negligible, as procurement of components is done by the OEM and Dixon's scope is limited to assembling.

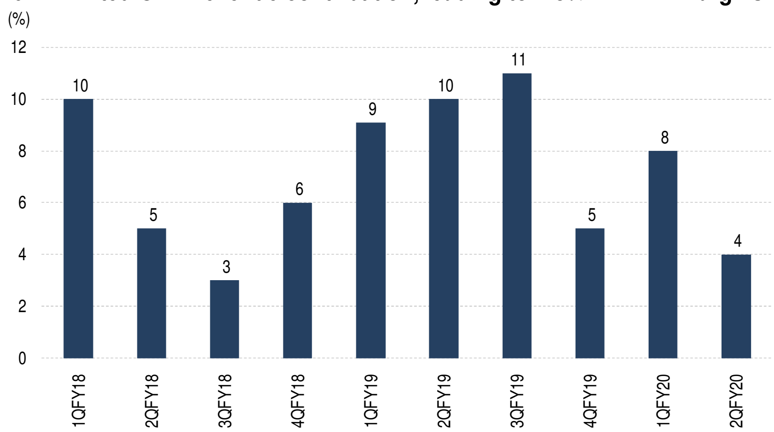
Major customers in this category are Xiaomi, Panasonic and private labels of leading e-commerce portals such as Flipcart and Amazon. A recent customer added in this segment is Samsung, which is ramping up Make-in-India in many categories. Dixon is also the licensed assembler for android-based television sets manufactured by leading OEMs. Based on customer relations in the television segment, Dixon caters to ~50% of the total market.

Fig 15 – Market-shares in TVs



Source: Industry

Fig 16 – Limited ODM revenue contribution, leading to 2-3% EBITDA margins



Source: Company

Fig 17 – Robust revenue growth as volumes ramp up

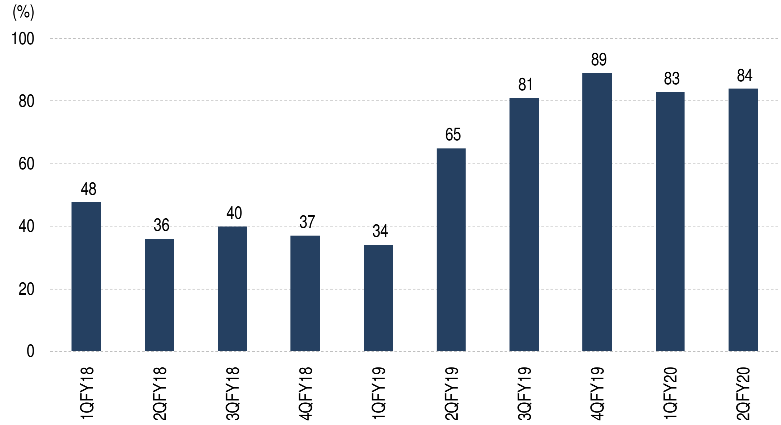
(₹ m)	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Revenue	1,650	4,661	2,282	2,136	2,228	3,597	2,879	3,233	5,098	7,382
Y/Y (%)	*-*	*75*	*(7)*	*23*	*35*	*(23)*	*26*	*51*	*129*	*105*
EBITDA	43.8	113.1	33.7	29.4	26.9	128.7	60.4	41	113.6	177.3
EBITDA - (%)	*2.7*	*2.4*	*1.5*	*1.4*	*1.2*	*3.6*	*2.1*	*1.3*	*2.2*	*2.4*

Source: Company

Lighting business leads ODM initiatives, set to chase export markets after domestic dominance: Dixon's manufacturing capability in lighting is 240m a year, sufficient to meet ~50% of India's lighting requirements. Its product range comprises 2,000 variants of LED bulbs of 12–50 watts. Capacity across products such as battens has also been increased from 250,000 a month to 800,000. OEMs catered to by Dixon are Philips, Syska, Bajaj Electricals, Wipro, Ajanta, Polycab and Usha.

Considering the fast-moving profile of the category, none of the OEMs have preferred to invest in manufacturing across their lighting segments. Apart from Havells and Crompton, none of the OEMs have sizable capacity in India to manufacture LED bulbs and prefer to outsource manufacturing. The lighting business is leading the ODM initiative for Dixon as 80% of its revenue booked is on an ODM basis. Also, exports in the lighting segment are expected to be ramped up because of Dixon's ability to design products and manufacture them cost-effectively.

Fig 18 – Major revenue booked from ODM-based products



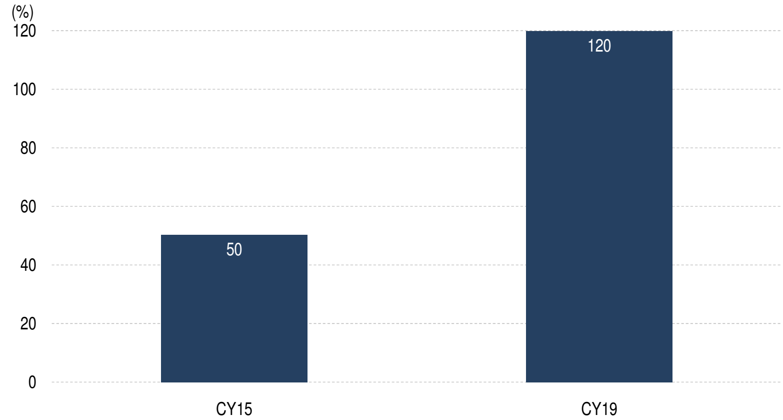
Source: Company

Fig 19 – Margin expansion aided by greater share of ODM products

(₹ m)	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Revenue	1,736	1,881	1,992	2,132	1,899	1,904	2,341	3,049	3,243	2,839
Y/Y (%)	-	*62*	*30*	*13*	*9*	*1*	*18*	*43*	*71*	*49*
EBITDA	69	129	140	135	145	111	189	216	254	230
EBITDA - (%)	*4.0*	*6.9*	*7.0*	*6.3*	*7.6*	*5.8*	*8.1*	*7.1*	*7.8*	*8.1*

Source: Company

Fig 20 – LED market has registered a 25% CAGR over CY15–19



Source: Industry

OEMs' preference for large contract-manufacturers for LEDs than for small ones is conducive to safety issues. According to an AC Nelson survey, 50% of the LEDs sold in India are unsafe and non-compliant. This can be attributed to the ~200 LED manufacturers in India, most small and medium enterprises. Increased tendering for LEDs by EESL over FY16–19 can be attributed to that. With EESL tendering for LEDs slowing down and OEMs preferring to outsource manufacturing to reputed manufacturers with a technological edge and balance sheet capabilities, the change is gradually working in Dixon's favour.

Scaling up the value chain while operating completely on an ODM basis, customer addition to further support volume ramp-up in home appliances: Unlike other business segments, home-appliances comprises assembly of washing machines, and has consistently operated 100% on an ODM basis since Q1 FY18. Currently, Samsung, Panasonic, Godrej and Lloyd are the major customers in this segment.

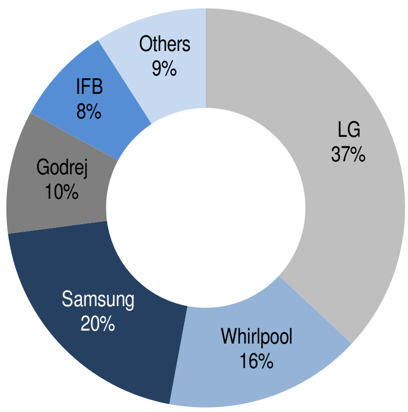
Based on customer relations, Dixon caters to ~30% of the Indian washing-machine market. It has installed capacity for 1.2m units a year in this segment. It has the widest product range, from 6kg to 8.5kg with 140-odd models and plans to enter 10kg washing machines by early next year. Exports can also be a new growth lever in this category in coming years.

Fig 21 – Operates solely on ODM basis

(₹ m)	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Revenue	394	581	698	810	857	1038	923	926	988	1391
Y/Y (%)	*-*	*(3)*	*55*	*92*	*118*	*79*	*32*	*14*	*15*	*34*
EBITDA	47	68	84	110	92	85	99	95	107	164
EBITDA - (%)	*11.9*	*11.7*	*12.0*	*13.6*	*10.7*	*8.1*	*10.8*	*10.2*	*10.8*	*11.8*

Source: Company

Fig 22 – Market-shares of leading OEMs in washing machines



Source: Industry

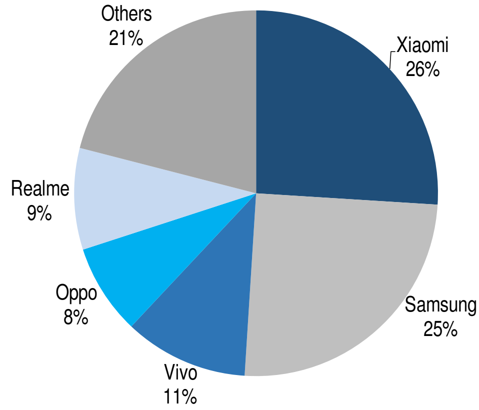
Samsung to drive growth in mobile phones; overall operations expected to be in an OEM mode: Dixon is one of the largest assembler of mobile phones in India, accounting for ~7-8% of India's requirements. Major OEMs serviced in this segment are Panasonic, Micromax and Gionee. Samsung, which has a 25% market share in domestic mobile phones is the recent customer in this category and is expected to be a major customer from the medium-term perspective. Considering the limited scope of technological development for a contract manufacturer, this business is expected to operate on an OEM-based model, which should keep EBITDA margins in a tight range.

Fig 23 – Robust growth on lower base

(₹ m)	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Revenue	2,926	1,417	1,584	772	732	637	1,511	669	1,437	1,934
Y/Y (%)	-	*(49)*	*(27)*	*(60)*	*(75)*	*(55)*	*(5)*	*(13)*	*96*	*204*
EBITDA	15	24	18	9	8	6	44	17	32	41
EBITDA - (%)	*0.5*	*1.7*	*1.1*	*1.1*	*1.1*	*0.9*	*2.9*	*2.5*	*2.2*	*2.1*

Source: Company

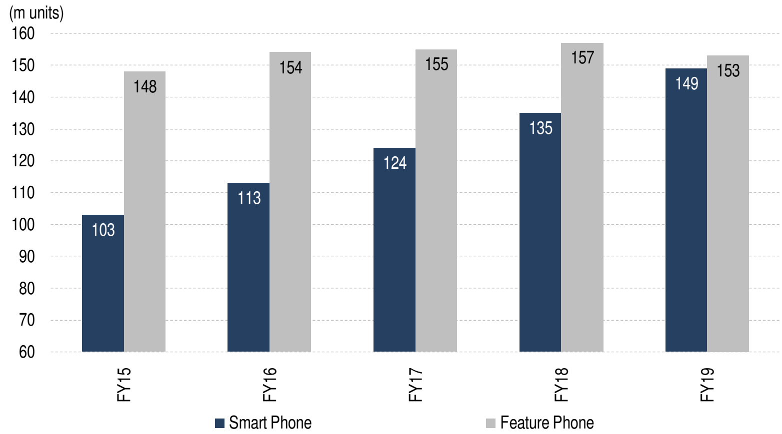
Fig 24 – Market shares of leading OEMs in domestic mobile phones



Source: industry

Favourable policy resulted in more assembling of mobile phones in India: The Indian mobile handset segment has touched ~300m units, making it the second largest market globally after China, a market of ~400m units a year. Aided by easy financing schemes, the Indian mobile handset market is expected to grow 15% in the medium term. Supported by favourable policy, assembly of mobile phones in India has seen a 73% CAGR over FY15–19 and is expected to ramp up.

Fig 25 – Indian mobile handset market: break-up, volume-wise



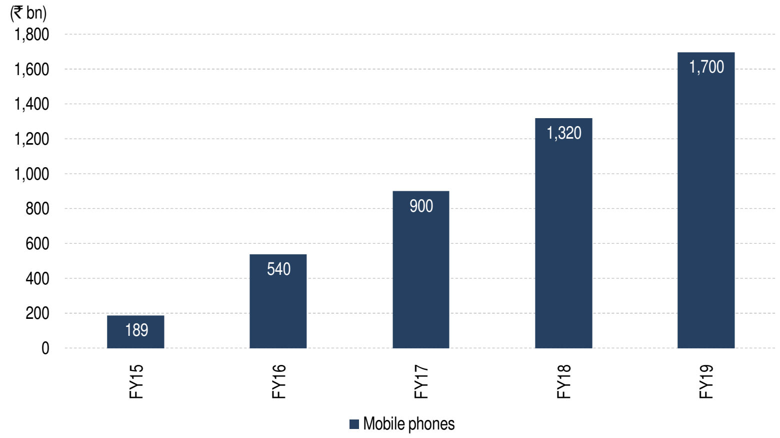
Source: Industry

Fig 26 – Systematic customs duty increase resulted in more assembling of mobile phones in India

Year	Customs duty (%)	Initiatives undertaken
FY17	15	Applicable on (a) chargers / adapters (b) battery packs (c) wired handsets
FY18	15	Applicable on (a) mechanics (b) die-cut parts (c) microphones and receivers (d) keypads (e) USB cables
FY19	10	Applicable on (a) printed circuit-board assembling (b) camera module (c) connectors
FY20	10	Applicable on (a) display assembling (b) touch panels / cover-glass assembling (c) vibrators / ringers

Source: Ministry of Information Technology and Electronics

Fig 27 – Manufacture of mobile phones has seen a 73% CAGR between FY15-19



Source: Ministry of Information technology and electronics

Security surveillance segment to report high growth on lower base: Dixon has installed capacity to manufacture 600,000 cameras and 150,000 DVRs. Manufacturing operations are under a JV with AIL-Dixon Technologies Pvt. Ltd. Security systems are marketed under the trademark CP PLUS. The security surveillance segment is a business with high entry barriers, with competition from Zicom Electronic Security, Dahua Technology of China, Samsung, Sony, Vitron Infromatic Pvt. Ltd., Bosch, Honeywell, Panasonic, etc. Overall, CCTVs are expected to grow ~12% with demand drivers expected to be mainly from tier-II, -III and -IV towns.

Fig 28 – Favourably placed in a high-growth market

(₹ m)	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Revenue	5	67	111	254	687	679	435
Y/Y (%)						911	292
EBITDA	-4	-5	-1	1	16	20	11
EBITDA - (%)	(3.4)	(4.5)	1.2	(8.2)	(35.7)	(4.6)	18.8

Source: Company

Financials of OEMs catered

Fig 29 – Xiaomi India Pvt Ltd: Infuses capital to strengthen Blitzkreig

(₹ m)	FY15	FY16	FY17	FY18	FY19	CAGR (%) FY16 - FY19
Mobile phones and accessories		9,346	82,556	2,24,179	3,14,506	*223*
IoT & lifestyle products				3,539	34,123	
Spare-parts sales		-	240	943	2,634	
Services income	113	1,116	548	689	1,496	*10*
Other operating income	-	-	-	123	265	
Revenue	**113**	**10,462**	**83,344**	**2,29,473**	**3,53,022**	*223*
Y/Y (%)		*9,171*	*697*	*175*	*54*	
EBITDA	19	(470)	1,903	3,409	(25,513)	*279*
EBITDA - (%)	***16.7***	***(4.5)***	***2.3***	***1.5***	***(7.2)***	
PAT	12	(469)	1,639	2,932	(1,485)	*47*
PAT - (%)	***10.7***	***(4.5)***	***2.0***	***1.3***	***(0.4)***	
Cash PAT	12	(467)	1,665	2,982	(1,313)	*41*
Cash PAT - (%)	***10.7***	***(4.5)***	***2.0***	***1.3***	***(0.4)***	
Exceptional items - Reward given by Xiaomi HK					**22,274**	
Net worth	18	(451)	1,187	4,119	37,831	
Outstanding debt	-	-	-	-	10,000	
Capital employed	**18**	**(451)**	**1,187**	**4,119**	**47,831**	
Fixed assets	1	19	88	513	618	
Cash	39	547	15,875	19,646	7,751	
NWC	(21)	(1,018)	(14,776)	(16,039)	39,462	
Capital deployed	**18**	**(451)**	**1,187**	**4,119**	**47,831**	
NWC days	**(68)**	**(35)**	**(65)**	**(26)**	**41**	
RoE (%)	-	*217*	*445*	*111*	*(7)*	
RoCE (%)	-	*217*	*624*	*169*	*(8)*	

Source: Ministry of Corporate Affairs

Fig 30 – Panasonic India Pvt Ltd: Widening losses, a concern

(₹ m)	FY15	FY16	FY17	FY18	FY19	CAGR (%) FY16 - FY19
Revenue	**39,673**	**47,989**	**55,454**	**53,209**	**47,586**	*(0)*
Y/Y (%)		*21*	*16*	*(4)*	*(11)*	
EBITDA	(133)	210	1,336	(561)	(3,566)	*(357)*
EBITDA - (%)	***(0.3)***	***0.4***	***2.4***	***(1.1)***	***(7.5)***	
PAT	(960)	(420)	722	(1,319)	(4,596)	*122*
PAT - (%)	***(2.4)***	***(0.9)***	***1.3***	***(2.5)***	***(9.7)***	
Cash PAT	(407)	188	1,315	(688)	(3,906)	*(375)*
Cash PAT - (%)	***(1.0)***	***0.4***	***2.4***	***(1.3)***	***(8.2)***	
Exceptional items						
Net worth	7,325	6,910	8,592	7,628	3,025	
Outstanding debt	17	42	58	3,254	5,848	
Capital employed	**7,342**	**6,952**	**8,650**	**10,882**	**8,872**	
Fixed assets	3,803	3,608	3,622	4,331	4,117	
Cash	1,552	1,413	2,458	533	481	
NWC	1,986	1,931	2,571	6,018	4,275	
Capital deployed	**7,342**	**6,952**	**8,650**	**10,882**	**8,872**	
NWC days	**18**	**15**	**17**	**41**	**33**	
RoE (%)	-	*(6)*	*9*	*(16)*	*(86)*	
RoCE (%)	-	*(6)*	*9*	*(14)*	*(47)*	

Source: Ministry of Corporate Affairs

Fig 31 – Godrej & Boyce: Struggling to generate single-digit returns

(₹ m)	FY15	FY16	FY17	FY18	FY19	Y/Y (%)
			% of total revenues			
Appliances				35	36	
Furniture				22	20	
Electronics and Electricals				7	8	
Storage & warehousing				6	6	
Locks				6	6	
Others				24	23	
			Actual revenue			
Appliances				33,975	39,399	*16*
Furniture				21,523	22,578	*5*
Electronics and Electricals				6,534	8,642	*32*
Storage & warehousing				6,162	7,073	*15*
Locks				5,966	6,896	*16*
Others				23,806	25,927	*9*
Revenue (SL)	**82,398.3**	**92,965.8**	**98,103.6**	**97,967.6**	**1,10,515.5**	
Y/Y (%)		*13*	*6*	*(0)*	13	
EBITDA	5,654	6,634	6,609	7,746	7,395	
EBITDA - (%)	***6.9***	***7.1***	***6.7***	***7.9***	***6.7***	
PAT	1,985	3,631	(215)	2,320	2,293	
PAT - (%)	***2.4***	***3.9***	***(0.2)***	***2.4***	***2.1***	
Cash PAT	3,644	5,207	1,572	4,334	4,449	
Cash PAT - (%)	***4.4***	***5.6***	***1.6***	***4.4***	***4.0***	
Exceptional items	**-**	**775**	**(2,424)**	**(359)**	**-**	
Net worth	35,297	34,905	76,999	93,923	92,065	
Outstanding debt	18,079	24,024	23,111	22,239	25,119	
Capital employed	**53,377**	**58,929**	**1,00,110**	**1,16,162**	**1,17,183**	
Fixed assets	17,799	20,746	25,318	27,977	31,914	
Non-current investments	14,128	16,307	53,698	65,706	61,891	
Cash	698	821	1,079	4,112	3,743	
NWC	20,751	21,055	20,014	18,368	19,636	
Capital deployed	**53,377**	**58,929**	**1,00,110**	**1,16,162**	**1,17,183**	
NWC days	**92**	**83**	**74**	**68**	**65**	
RoE (%)	*11*	*10*	*(0)*	*3*	*2*	
RoCE (%)	*10*	*7*	*1*	*3*	*3*	

Source: Ministry of Corporate Affairs

Fig 32 – Samsung India Electronics Pvt Ltd: Competition hots up

(Rs m)	FY16	FY17	FY18	FY19	FY16 - FY19 CAGR (%)
Revenue	**4,74,304**	**5,45,313**	**5,93,709**	**7,06,277**	*14*
Y/Y (%)		*15*	*9*	*19*	
EBITDA	**49,790**	**72,726**	**69,927**	**45,871**	*(3)*
EBITDA - (%)	*10.5*	*13.3*	*11.8*	*6.5*	
PAT	**30,104**	**41,562**	**37,127**	**15,401**	*(20)*
PAT - (%)	*6.3*	*7.6*	*6.3*	*2.2*	
Cash PAT	**34,994**	**45,997**	**42,127**	**22,103**	*(14)*
Cash PAT (%)	*7.4*	*8.4*	*7.1*	*3.1*	
Exceptional items					
Net worth	1,00,065	1,41,534	1,78,624	1,93,993	
Outstanding debt	1,11,223	66,805	1,64,108	1,65,801	
Capital employed	**2,11,288**	**2,08,339**	**3,42,732**	**3,59,794**	
Fixed assets	18,019	19,837	29,025	45,737	
Cash	70,004	1,25,041	1,25,635	87,865	
NWC	1,23,265	63,461	1,88,072	2,26,192	
Capital deployed	**2,11,288**	**2,08,339**	**3,42,732**	**3,59,794**	
NWC days	26	12	32	32	
RoE (%)	*60*	*39*	*27*	*9*	
RoCE (%)	*90*	*64*	*41*	*17*	

Source: Ministry of Corporate Affairs

Fig 33 – Key assumptions and monitorables across each business segment over FY20 – FY22

(₹ m)	FY17	FY18	FY19	FY20e	FY21e	FY22e	FY20 - 22 CAGR (%)	Key assumptions and monitorables
Consumer electronics								
	8,448	10,735	11,937	22,679	29,483	36,854	*27*	Robust growth taken as Samsung is now its customer. Aggressive focus of Xiaomi and higher volumes from E commerce players to watch out for.
y/y (%)	*10*	*27*	*11*	*90*	*30*	*25*		
EBITDA	254	231	250	522	590	737	*19*	Margins to be constrained because business is on OEM designs
EBITDA - (%)	*3.0*	*2.1*	*2.1*	*2.3*	*2.0*	*2.0*		
Lighting products								
	5,508	7,742	9,194	12,411	14,893	17,872	*20*	Exports aided by a MNC customer to watch out for. Lower growth rates taken considering high penetration of LED bulbs in India.
y/y (%)	*22*	*27*	*31*	*25*	*24*	*24*		
EBITDA	171	469	660	968	1,191	1,430	*22*	Rising share of exports on ODM basis can help in maintaining higher margins
EBITDA - (%)	*3.1*	*6.1*	*7.2*	*7.8*	*8.0*	*8.0*		
Home appliances								
	1,880	2,503	3,744	4,792	6,230	7,787	*27*	Growth aided by migration from semi automatic to fully automatic machines across existing customers and Export to watch out for
y/y (%)	*44*	*33*	*50*	*28*	*30*	*25*		
EBITDA	314	307	370	551	748	934	*30*	Fully ODM compliant business segment results in higher margins
EBITDA - (%)	*16.7*	*12.3*	*9.9*	*11.5*	*12.0*	*12.0*		
Mobile phones								
	8,107	6,698	3,549	6,210	7,763	9,316	*22*	Addition of Samsung to drive volumes. Growth from Panasonic and other Chinese OEMs to be an important growth trigger.
y/y (%)		*(17)*	*(47)*	*75*	*25*	*20*		
EBITDA	50	65	74	497	621	745	*22*	Margin expansion expected from 2HFY20, aided by rising volumes from Samsung
EBITDA - (%)	*0.6*	*1.0*	*2.1*	*8.0*	*8.0*	*8.0*		
Security systems								
			1,120	2,521	2,899	3,334	*15*	Business ramp up to happen on lower base. Growth to be higher than industry rate (Industry growth to be around 12%)
y/y (%)			*-*	*125*	*15*	*15*		
EBITDA			12	76	87	100	*15*	Margin expansion expected to be limited; However, positive surprises can be expected if growth is aggressive.
EBITDA - (%)			*1.1*	*3.0*	*3.0*	*3.0*		
Reverse logistics								
	627	734	302	151	166	183	*10*	Business comprises mainly of repair and maintenance support to existing OEM's. Not expected
y/y (%)	*60*	*17*	*(59)*	*-50*	*10*	*10*		

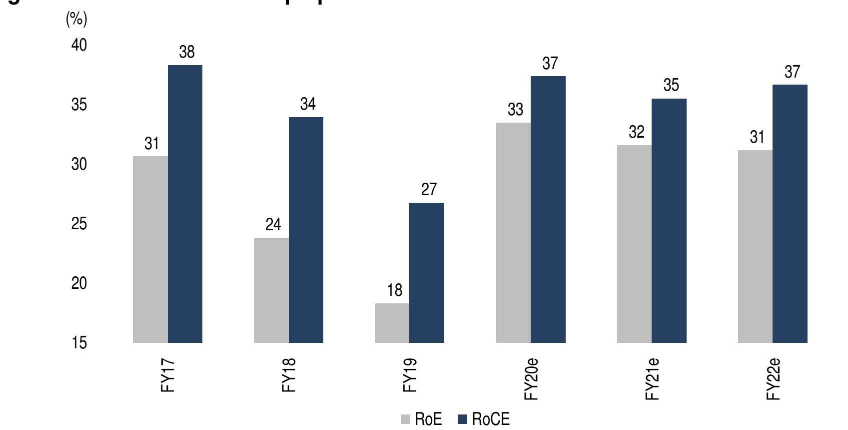
Valuations

We initiate coverage on Dixon Technologies, with a Buy recommendation and a target of ₹5,822 (25x FY22e EPS of ₹233) as we model 24% and 32% CAGRs over FY20-FY22 in respectively revenue and PAT, resulting in the RoCE expanding from 26% in FY19 to ~36% in FY21 and FY22.

Key monitorables ahead would be Dixon's ability to maintain relations with its OEMs and in securing new OEMs, especially MNC brands which do not have manufacturing facilities in India. Expansion across new product categories and the capital investments needed would also be important monitorables, as they can have an impact on return ratios.

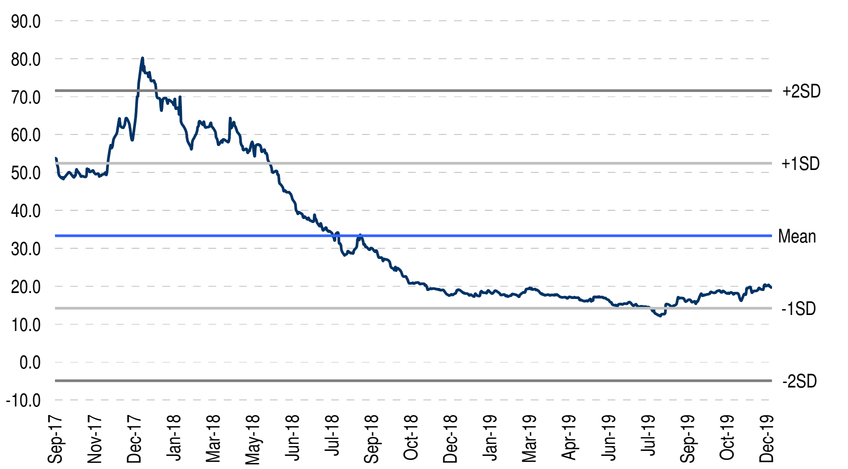
The huge rise in competition from global contract manufacturers such as Foxcon and Holitech Technolgies is the key risk. However, OEMs' preference to keep the vendor base diversified lowers this risk for Dixon.

Fig 34 – Return ratios to ramp up between FY20-22



Source: Company, Anand Rathi Research

Fig 35 – SD band



Source: Bloomberg

Risks & concerns

- **Tougher competition especially from Chinese contract manufacturers:** Because of their limited business offerings, and size and scale, stiff competition from domestic peers such as P G Electroplast is expected to be restricted. Competition from Chinese peers such as Holitech Technologies, which was incorporated in India in Apr'18 and has assembling operations in India would be an important factor to watch.
- Holitech was invited to India by Xiaomi and intends to invest $200m in India in the next three years to manufacture compact camera modules and touch-screen modules, thin-film transistors and flexible printed circuits. Holitech's plant is expected to cover 25,000 sq.metres in Greater Noida and would have installed capacity for 300m components annually.
- **Losing customers/non-acceptance of products launched:** Dixon's scope of operations comprises mainly B2B customers with production schedules varying across multiple product SKUs and categories, eventually resulting in concentration risk in each product division. Loss of any of the customers along with non-acceptance of the products launched can have an impact on Dixon's growth prospects.
- **Consistent volatility in commodity and currency prices:** Global sourcing of components and critical raw materials for manufacturing processes is done regularly. Consistent volatility in commodity prices and currency can have an impact on Dixon's margins. However, most of the manufacturing contracts have in-built clauses which aid the passing on of higher prices to OEMs regularly, limiting the impact of excessive inflation for a short spells.
- **Change in duty structures which favour imports rather than Make in India:** A duty structure which aids manufacturing at lower costs has an important and a critical role in supporting Make-in-India. Any meaningful change in duty structures can have a significant impact on manufacturing plans of several of Dixon's customers. Trade pacts, which lower the impact of higher customs duty on imports of white goods, can also have an impact on Dixon's growth prospects.

Company Background & Management

One of the leading design-focused and solutions-provider into contract manufacturing of consumer durables, lighting and mobile phones in India, Dixon Technologies started in 1994 assembling colour television sets. It now broadens its product basket regularly. Its diversified product range in 2019 includes LED TVs, washing machines, LED bulbs, feature phones and "smart" phones, security surveillance systems such as CCTVs and DVRs. Recently, it reached the strategic milestone of 100,000 units produced, a milestone for Samsung as well.

Fig 36 – How Dixon expanded its product range at regular intervals

Year	Product launched
1994	Colour TVs
2007	LCD TVs
2008	CFL lighting, reverse logistics
2010	LED TVs, washing machines
2016	phones
2017	CCTVs, digital video recorders

Source: Company

Fig 37 – Manufacturing footprint in each product category

Noida, Gautam Buddha Nagar, Uttar Pradesh (4 plants)	LED bulbs, PCB assembly of air-conditioners
	Mobile phones
	Lighting & Reverse Logistics
	LED bulbs and parts
Dehradun, Uttarakhand (4 plants)	Battens, T-LEDs, down lighters, ballast, etc.
	Washing machines
	Backward integration of plastic parts and sheet-metal components
	Washing machines
Chittoor, Andhra Pradesh (2 plants)	LED TVs
	CCTVs and DVRs

Source: Company

Fig 38 – Partial list of awards and accolades received

Year	Awards and accolades received
2019	"Award of Excellence" by the University of Engineering & Management at IIT, Delhi
2018	"Best Employer Brand " in north India at "World CSR Day and World Sustainability"
2018	"Electronic Company of the Year" by ELCINA-EFY
2018	"Recognized for Greater Together" from Philips Lighting at Go-for-Growth supplier event, India 2018
2018	Appreciation award from the Public Relations Council of India at the 8th Annual Corporate Collateral Awards, 2018, in the category of corporate films
2018	The "Dixon" trademark registered with The Trademark Registry under class 9
2017	The "Dixon" trademark registered with the Trademark Registry under class 37
2017	Registered with The Department of Scientific & Industry Research (DSIR)
2017	United Registrar of Systems for compliance with environmental-management systems in manufacturing and supplying washing machines at the Dehradun-II plant
2016	Development Excellence Award (semi-automatic washing machine) by Panasonic India Pvt. Ltd.
2016	ISO 14001: 2004 by the United Registrar of Systems for compliance by PEPL with environmental-management systems in manufacturing mobile phones at the Noida-II plant
2016	ISO 9001:2008 by the United Registrar of Systems for compliance by PEPL with quality-management systems in manufacturing mobile phones at the Noida-II plant
2011	'Best OEM Award 2011' awarded by CEAMA

Source: Company

Management team

Executive Chairman Sunil Vachani with a degree from the American College in London has over two decades' experience in EMS and was given the "Man of Electronics Award" by CEAMA in 2015, the "Outstanding Citizen Award 2012" by the Sindhi Chamber of Commerce and one of the "Top-100 people influencing EMS" in 2012 by VentureOutsource.com. He was chairman of The Electronics and Computer Software Export Promotion Council of India and co-chair of the CII ICTE Committee.

Managing Director Atull B Lall has a master's in management studies from The Birla Institute of Technology and Science, Pilani, and has been associated with Dixon since inception. With more than 25 years' experience in EMS, he has been a member of The Technical Evaluation Committee for Electronic Manufacturing Services under M-SIPS (Electronic Manufacturing Services-EMS) constituted by the DeitY and was a representative of ELCINA on The Committee for Reliability of Electronic and Electrical Components and Equipment (LITD. 02) of the BIS.

CFO Saurabh Gupta has more than 14 years' experience in corporate finance, strategic planning and investor relations. Formerly employed with PVR, Unitech and Mckinsey, he has an MBA (Executive Programme) from MDI, Gurgaon. He is also an associate member of the ICSI and ICAI. He leads the finance and accounts team and is responsible for all activities pertaining to accounts, Treasury management and MIS. He heads the strategic-planning and investor-relations functions.

Non-executive independent director Manoj Maheshwari is a fellow of The Institute of Chartered Accountants of India and an associate of The Institute of Company Secretaries of India, with 29 years' experience in finance, including M&A, capital expenditure and fund-raising (both debt and equity). He has, besides, a post-graduate diploma in business administration from The Symbiosis Centre for Distance Learning.

Non-executive independent director Poornima Shenoy is a serial entrepreneur, an industry veteran and the co-founder and CEO of a tech accelerator, The Gain. She is the founding president of The Indian Electronics and Semiconductor Association (IESA) and on its executive council. She is a TiE charter member.

Non-executive independent director Dr Manuji Zarabi has a Ph.D. from the Indian Institute of Science, Bangalore. For 26 years he was associated with Semiconductor Complex, a government of India enterprise and retired as CMD in Aug'05. He was member of the working group on development of R&D and IP in electronics, formed at DeitY.

Non-executive independent director Keng Tsung Kuo has over 30 years' extensive experience in business and globalisation strategy, change management and leadership & management. He has a Master's in Electrical Engineering from The National Taiwan University and an Executive MBA from the National Taiwan University. He is a committee member of the Asia-Pacific Industrial Cooperation and Chinese National Industry Federation. He also served as an adjunct professor at The National Taiwan University. At present, he is an "Advisor" to key institutions in Taiwan such as the Industry Development Bureau - MOEA, Hsinchu Science Park Bureau - MOST and the Taiwan-India Business Association.

Appendix

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Large Caps (>US$1bn)	>15%	5-15%	<5%
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