

Mossberg's Investor Digest

From the Editor...

Thank you for your subscription to Mossberg's Investor Digest.

Headquartered in LaFox, IL (near Chicago), 70+ year old **Richardson Electronics (Nasdaq: RELL)** has undergone significant transformation in the last several years.

Eleven years ago, the company sold its business that provided tubes for close circuit TVs and cameras, and seven years ago the Company sold its RF semiconductor business. While the Company sold assets and reduced its revenue base by approximately 75%, it kept the infrastructure necessary to bring products to market on a global basis (60% of sales are from outside of the U.S.) The Company currently services 20,000 customers worldwide through 60+ sales offices and stocking locations in 24 countries.

With the proceeds of its divestitures, RELL has reinvested in developing a new business to provide components for medical imaging devices (CT and MRI). While this new business unit (named Healthcare) represents just 5% of revenue, it is expected to grow rapidly and become the largest business unit.

The second of RELL's three business units is Canvys (15% of revenue), which provides custom display solutions for OEMs. Canvys is the lowest margin business, producing gross margins in the mid-to-high twenties, but is growing at a double-digit pace.

The third business unit, Power & Microwave Technology (PMT), currently comprises the bulk (80%) of revenue. Inside this business is the core legacy tube products. This legacy business produces about \$100 million annually, providing aftermarket replacement tubes used in applications such as radio communications, transmitters for broadcasting, etc. This segment is very stable and supports the growth in other areas of the business. The PMT segment also includes a new technology group, which provides components for the wafer fab equipment market and new technology markets, such as 5G infrastructure and power management for alt. energy applications.

The market is not giving RELL credit for the recent improvement in financial performance. After reporting its best year and quarter since 2011, the stock is trading 25% off the high end of its 52-week range and well below book value. We think this represents an opportunity for patient investors who are willing to collect the dividend (3.4% yield) until investors begin to recognize improvements, as well as the significant potential of the new healthcare business.

Dave Mossberg

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Every month we hear ideas suggested from our large network of professional investors. Here are a few of the ideas we heard this month.

Volt Information Sciences, Inc. (NYSE: VISI)- Is an international provider of staffing services, outsourcing solutions, and information technology infrastructure services. Staffing services include providing contingent workers and personnel recruitment services, supporting primarily professional administration, technical, information technology, and engineering positions. outsourcing solutions consist of project-based IT and technology services including development, quality assurance, localization, and technical support. Information technology infrastructure services provide server, storage, network, and desktop IT hardware maintenance, data center and network monitoring, and operations support.

Tempur Sealy International, Inc. (NYSE: TPX) - Is the world's largest bedding provider. The company develops, manufactures and markets mattresses, adjustable bases, pillows and other sleep and relaxation products. Combining a proud history and groundbreaking innovation, the company holds some of the most highly recognized brands in the industry: Tempur®, Tempur-Pedic®, Cocoon™ by Sealy, Sealy®, and Stearns & Foster®.

Midstates Petroleum Company, Inc. (NYSE: MPO) - Is an independent exploration and production company focused on the application of modern drilling and completion techniques in oil and liquids-rich basins in the onshore U.S. The company is headquartered in Tulsa, Oklahoma. Their operations are currently focused on oilfields in the Mississippian Lime play in Oklahoma.

RigNet (NASDAQ: RNET) - Is a global technology company that provides customized communications services, applications, real-time machine learning, and cybersecurity solutions to enhance customer decision-making and business performance. RigNet delivers a digital transformation bundle that accelerates technology adoption and empowers customers to be always connected, always secure, and always learning. RigNet is headquartered in Houston, Texas with operations around the world.

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Best Idea Profile:

Richardson Electronics, Ltd. (Nasdaq: RELL)

DESCRIPTION:

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Richardson Electronics, Ltd. (Nasdaq: RELL) Investment Data (as of 11/30/18)

Recent Price	\$7.18
52-Week Range	\$6.26 - \$10.40
Fiscal Year End	May
Dividend	\$0.24
Yield	3.4%
Shares Outstanding*	13.0 M
Average Trading Volume (3 mos)	11,000
Market Capitalization	\$98M
Cash & Equivalents	\$55M
LT Debt	-
Enterprise Value (EV)	\$43M
TTM Revenue	\$170 M
EV/ Revenue	0.25x
TTM EBITDA	\$7.4M
EV/ EBITDA	5.8x
Book Value/ Share	\$10.31
*assumes conversion of Class B Shares	

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KEY INVESTMENT CONSIDERATIONS:

Disrupting the CT tube market – an oligopoly market worth \$4 billion

Post divestitures, RELL had about \$100 million in cash, an expertise in tube manufacturing, and a global sales and distribution infrastructure. After evaluating alternatives, management decided it would leverage its infrastructure to enter the tangential market for tubes used in CT scanners.

- **An attempt to buy Phillips tube business** – To enter the market CT scanner tubes, the company first tried to buy the CT tube division of Phillips, which is located about 20 miles away from RELL's corporate headquarters. Unable to agree to terms of a sale, RELL hired a senior leader from Phillips along with 20 engineers and spent three years and \$35 million developing their own technology and manufacturing capability. They released the first tube to the market, the Alta 750, in June of 2018.
- **Secular growth in CT Scanner market** – There are 60,000 scanners around the world. Each scanner has a tube and tubes are replaced every 2-3 years. Using an average price of \$160,000 per tube and assuming an average life cycle of 2.5 years yields an annual market of approximately \$4 billion. Not only is this a sizable market, the CT scanner market is one segment of the tube market that is still growing rapidly. According to Statistics MRC, the Global CT Scanners market is expected to grow at a CAGR of 8.6% through 2026. Manufacturing the tubes is difficult. It requires clean room environment and the product must meet stringent tolerances. Tubes weigh 225 lbs, spin inside the scanner at 3 rotations per second. Inside the tube is an anode that spins at 8,500 RPM operating at 140 Kilovolts and 600 degrees Celsius. Check out this video that illustrates the inside of a CT scanner... <https://www.youtube.com/watch?v=2CWpZKuy-NE>.
- **New entrant in a market with only five other players** – Given the complexities of the CT tube, it is easy to see why there are only 5 other companies in the world that can manufacture them. Most of the market for CT tubes is cornered by the CT OEMs (GE, Phillips, Siemens, Toshiba/ Cannon, and Varex). OEMs price tubes at \$200k retail, and as low as \$125,000 for high volume orders.
- **RELL's compelling value proposition** - RELL has released its Alta 750 tube at a retail price of \$90k and at \$75k in large quantity orders. This represents a 40% to 55% discount relative to OEM pricing. Even at this pricing, RELL expects to generate a gross margin of about 40%.

OEM Pricing: \$125K to \$200 K

RELL Pricing: \$75K-\$90K

RELL Pricing relative to OEM: 40%-55% lower than OEM

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KEY INVESTMENT CONSIDERATIONS:

Disrupting the CT tube market – an oligopoly market worth \$4 billion (continued)

Go-To-Market Strategy

- **Focus on Toshiba Scanners** – RELL's Alta 750 will replace the tubes in Toshiba scanners, which have an installed base of approximately 12,000. The company is now developing a second aftermarket CT tube also for use in Toshiba Scanners. The second tube is expected to be available in 18 months.
- **Establish a turnkey offering with an established customer base** – The Company purchased IMES, a CT service company that supplies replacement parts (other than tubes) for Toshiba CT and MRI equipment. For every tube that is sold there is about \$15,000 worth of parts that go along with it. IMES gives RELL a turnkey offering and brings an established base of customers that are potential buyers of the Alta 750.
- **How will they to compete against the OEM's?** – Despite the cost savings, there will be resistance to using an aftermarket tube. The OEM's are likely to void the warranty of the machine should a medical institution, or CT service company use a third-party tube. In order to overcome this resistance, RELL has introduced a 24-36 month service contract that will supply replacement tubes and parts on a 24 hour basis for a monthly fee, similar to an insurance policy. These service contracts are expected to produce a 50% gross margin.
- **Capacity** - In the Company's manufacturing facility, they have the capacity to build about 1,000 tubes per year. The company has plenty capital (\$55 million in cash) and room to expand production capacity. On recent calls, management indicated they would rather preserve the cash for this type of capacity expansion than to repurchase shares.
- **Potential for significant growth in recurring revenue** - In the table below we illustrate the potential revenue at various levels of unit volume. We expect most of the tubes will be sold, along with other replacement parts, as part of a service contract and estimate that the price of an annual service contract will be approximately \$50,000 per year. While selling units as part of a multi-year contract will slow the pace of growth, it will make for a more recurring and predictable revenue stream, and in turn, is likely to lead to a higher valuation multiple. As the production reaches the first level of capacity, the Company should generate \$50 million in highly profitable and predictable annual revenue. It is not unreasonable to expect that this business could command a valuation multiple of 3-4x revenue, which by itself would be worth more than twice the company's current valuation.

CT's under Contract	100	500	1,000	2,000
Rev/ Contract/ year (in \$ millions)	0.05	0.05	0.05	0.05
Revenue Potential (in \$millions)	\$5	\$25	\$50	\$100

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Valuation

	FY17	FY18	FY19	FY20	FY21
PMT	104	128	135	141	149
Canvys	21	27	28	29	31
Healthcare	12	8	16	23	31
CT's under Contract			150	300	450
Rev/ Contract/ year			0.05	0.05	0.05
Total Revenue	137	163	178	194	210
PMT	33	43	45	48	50
Canvys	6	8	9	9	10
Healthcare	5	3	7	10	13
Total Gross Profit	44	55	61	67	73
PMT	32.0%	33.7%	33.7%	33.7%	33.7%
Canvys	28.0%	31.5%	31.5%	31.5%	31.5%
Healthcare	39.2%	41.5%	41.5%	42.5%	43.5%
Total Gross Margin	32.1%	33.7%	34.1%	34.4%	34.8%
SG&A	50	52	54	57	60
D&A	3	3	3	3	3
EBITDA	-3.2	6.3	9.5	12.8	16.3
EBITDA Margin	-2.4%	3.9%	5.3%	6.6%	7.8%
Capex			6	6	6
FCF			3.5	6.8	10.3
Dividends			3	3	3
Cash		61	61	65	72
EV/EBITDA Multiple					8
Enterprise Value					130
Market Cap					202
Shares Outstanding					13
Valuation					\$15.57

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Our back of the envelop model on the previous page makes the following assumptions:

PMT and Canvys Revenue: For 2019 through 2021 we assume 5% growth for the PMT and Canvys business units. We believe this growth rate is conservative given the secular growth drivers of these two businesses and the double-digit growth recently experienced.

Healthcare Revenue: Our model shows that Healthcare revenue will nearly triple from its relatively small base during the next three years. Given that the CT product was just introduced, it's too early for management to set expectations for revenue. However, they are clearly hoping to fully utilize the current annual capacity of 1,000 units and are holding cash in anticipation of adding additional capacity. We expect most of these units will be sold on a service contract basis, which will slow the revenue ramp, but make revenue more recurring and predictable, likely leading to a higher valuation multiple. To make things simple, we assume the current base of revenue will not grow and that incremental revenue comes only from services contracts. We assume 150 new contracts each year at an average price of \$50,000 per year per unit. We think the assumptions for unit growth are very conservative.

Overall Revenue: Our model yields an annual growth rate of approximately 9%

Gross Margin: Our model yields 80 basis points of improvement in gross margin, which is largely due a mix shift that will include a greater portion of higher-margin healthcare revenue. We also assume that Healthcare gross margin will improve 100 basis points each year in 2020 and 2021 as the production gains scale and efficiency. We assume gross margin in the other tow business units will remain unchanged from FY18 levels

SG&A: We assume 5% growth in SG&A expenses, as we expect the expense line to grow at about 2/3 the rate of revenue growth.

Cash Flow: We use EBITDA as a proxy for operating cash flow and subtract CAPEX to generate our cash flow number. Less dividend payments, the cash balance should grow modestly over the next three years.

Valuation: We use an 8x multiple of 2021 EBITDA to derive an enterprise value of \$130 million. We expect RELL is likely to continue to trade a discounted multiple due to its A/B share structure. An 8x multiple may still prove to be conservative given the potential for double digit growth, enhanced returns and the recurring and predicable nature of the future revenue streams. Working backwards from enterprise value, we calculate a share price of \$15.57 per share in 2021, which represents more than 100% upside from current levels.

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Mossberg's Investor Digest Idea Performance

The table below shows the relative change in the value of the ideas published since January 2016 and the Russell 2000. **Performance data quoted represents past performance and does not guarantee future results.** Current performance of ideas may be lower or higher than the performance quoted.

Company	Pub. Date	Original Price	Recent Price	Change	Russell 2000 Change Since Pub. Date	Relative Perf. vs. Russell 2000	
Dycom Industries, Inc (NYSE: DY)	31-Jan-16	\$62.18	\$65.48	5.3%	47.3%	-42.0%	
Rackspace Hosting, Inc. (NYSE: RAX)	29-Feb-16	\$21.54	\$32.00	48.6%	47.5%	1.0%	
Kopin Corporation (Nasdaq:KOPN)	31-Mar-16	\$1.66	\$1.68	1.2%	36.9%	-35.7%	
PAR Technology Group (NYSE: PAR)	30-Apr-16	\$6.39	\$19.50	205.2%	34.9%	170.3%	
Full House Resorts Inc. (Nasdaq: FLL)	30-May-16	\$1.60	\$2.31	44.4%	32.6%	11.8%	
Control4 Corporation (Nasdaq: CTRL)	30-Jun-16	\$7.99	\$21.64	170.8%	32.4%	138.4%	
KapStone Paper and Packaging Corporation (NYSE: KS)	31-Jul-16	\$14.28	\$35.00	145.1%	25.0%	120.1%	
Ampco-Pittsburgh Corp. (NYSE: AP)	31-Aug-16	\$11.12	\$4.00	-64.0%	23.0%	-87.1%	
Select Comfort Corporation (Nasdaq: SCSS)	30-Sep-16	\$22.51	\$32.50	44.4%	21.9%	22.5%	
Northwest Pipe Co. (NWPX)	31-Oct-16	\$13.16	\$23.49	78.5%	28.0%	50.5%	
Mitel Networks Corporation (Nasdaq: MITL)	30-Nov-16	\$7.25	\$11.16	53.9%	15.4%	38.5%	
Black Box Corporation (Nasdaq: BBOX)	31-Dec-16	\$15.25	\$1.07	-93.0%	12.4%	-105.4%	
RadNet, Inc. (Nasdaq: RDNT)	31-Jan-17	\$5.80	\$12.77	120.2%	12.0%	108.2%	
Guidance Software, Inc. (Nasdaq: GUID)	28-Feb-17	\$6.60	\$7.10	7.6%	10.0%	-2.4%	
Calgon Carbon Corporation (NYSE: CCC)	31-Mar-17	\$14.25	\$21.50	50.9%	10.1%	40.8%	
LRAD Corporation (Nasdaq: LRAD)	30-Apr-17	\$1.51	\$2.74	81.5%	8.9%	72.5%	
Treco Resources (NYSE: TREC)	31-May-17	\$10.65	\$9.19	-13.7%	11.3%	-25.0%	
EVINE Live Inc. (Nasdaq: EVLV)	30-Jun-17	\$1.00	\$0.61	-39.0%	7.8%	-46.8%	
LSI Industries Inc. (Nasdaq: LYTS)	31-Jul-17	\$8.38	\$4.38	-47.7%	7.0%	-54.8%	
Cooper Tire & Rubber Company (NYSE: CTB)	31-Aug-17	\$33.80	\$34.22	1.2%	8.5%	-7.3%	
RealNetworks, Inc. (Nasdaq: RNWK)	30-Sep-17	\$4.78	\$2.66	-44.4%	2.3%	-46.7%	
NCI Building Systems, Inc. (NYSE: NCS)	30-Oct-17	\$15.65	\$11.48	-26.6%	2.3%	-29.0%	
TransAct Technologies, Inc. (Nasdaq: TACT)	30-Nov-17	\$13.60	\$10.40	-23.5%	-1.2%	-22.3%	
Regis Corporation (NYSE: RGS)	30-Dec-17	\$15.36	\$18.20	18.5%	-0.7%	19.1%	
Team, Inc. (NYSE: TISI)	30-Jan-18	\$16.95	\$16.92	-0.2%	-3.6%	3.5%	
Andina Acquisition Corp II (Nasdaq:ANDA)	28-Feb-18	\$9.85	\$5.48	-44.4%	0.9%	-45.2%	
GSE Systems, Inc. (NYSE:GVP)	31-Mar-18	\$3.25	\$2.95	-9.2%	-0.3%	-9.0%	
Telaria, Inc. (NYSE:TLRA)	30-Apr-18	\$4.13	\$3.00	-27.4%	-1.1%	-26.3%	
Avaya Holdings Corp. (NYSE:AVYA)	31-May-18	\$21.57	\$15.21	-29.5%	-6.6%	-22.9%	
Tenneco, Inc. (NYSE:TEN)	30-Jun-18	\$43.96	\$33.45	-23.9%	-7.2%	-16.7%	
Alithya Group Inc.	31-Jul-18	\$3.40	\$3.80	11.8%	-8.7%	20.5%	
Data I/O Corporation (Nasdaq: DAIO)	30-Aug-18	\$5.37	\$5.00	-6.9%	-11.9%	5.1%	
TPI Composites Inc. (Nasdaq: TPIC)	28-Sep-18	\$28.55	\$26.84	-6.0%	-10.1%	4.1%	
Shiloh Industries, Inc. (Nasdaq: SHLO)	31-Oct-18	\$8.59	\$8.15	-5.1%	0.9%	-6.0%	
				Average	17.2%	11.4%	5.8%

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The value proposition of the digest is essentially an "Idea Generator". During the course of my 18-year career in capital markets, I've had the chance to meet and work closely with some very smart professional investors who have consistent track records of outperforming the market indexes. Some of these investors, which include mutual fund managers, hedge fund managers, and other professional investors, are kind enough to share their best ideas with me. I conduct my own analysis of their ideas and publish summaries of those ideas I think represent timely investment opportunities. Over time, I trust the majority of these ideas will pan out and help subscribers generate index-beating returns.

The goal of the Best Idea Profiles in this newsletter is to briefly describe the most relevant investment merits and risks of a company. It is not intended to be an exhaustive report including every detail. With limited space available, I am forced to include only those data points that I feel are most important for subscribers to know before they begin their own due diligence. Thank you for your interest in Mossberg's Investor Digest.

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