HubOEM
Parts, Services, Documents

Demand Management: A Lost Opportunity to Drive Enterprise Value for Automation Equipment OEMs

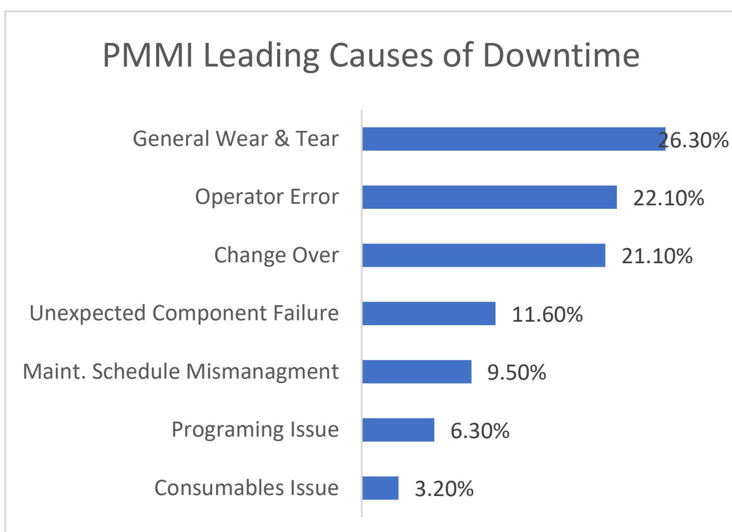
Driving a business' valuation is an important objective for any CFO/executive leadership team. Strong, well supported valuations can give management teams and financial sponsors a much stronger hand at the negotiation table when considering the sale of their business. Even if you are not looking to sell, a higher valuation can help your organization get access to cheaper capital and provide current shareholders with hard evidence of the strength of their investment. Regardless of the specific methodology used, at its core, the value of a business is driven by the amount firm's current earnings, the expected growth rate of the firm's earnings, and their stability/predictability into the future.

In working to improve these underlying drivers of valuation, the Factory Automation Industry has a unique tool in its arsenal - proactive after-sale demand management ("PASDM").
PASDM involves OEMs forming closer relationships with their customers to create a more consistent, forecastable schedule for wear parts, services, and consumables. In a world of rising labor costs, supply chain bottlenecks, and uncertain inflation expectations, strengthening this OEM/Customer relationship can pay tremendous dividends that can increase an OEM business' valuation.

PASDM…	Current Earnings	Earnings Growth	Earnings Stability
Boosts Higher-Margin Revenue from Services/Replacement Parts		✓	✓
Generates Visibility into Recurring Revenue			✓
Reduces a Firm's Working Capital Requirements	✓	✓	

PASDM Boosts Higher-Margin Revenue from Services/Replacement Parts

Automation OEMs typically derive most of their revenue from three sources, the first and most obvious being new equipment sales, then services including training, and lastly through the sale of replacement parts, especially wear parts like belts, springs, and bearings. The exact balance of these three areas will vary from one organization to the next, depending heavily on the type and complexity of machines being sold. Replacement parts and service typically comprise anywhere from a small percentage to over half of a company's top line revenue number. Despite this, most organization's focus sales resources on new equipment sales. Obviously, new equipment sales are linked to spare parts volumes, however, all too often little or no attention is given to proactive parts sales.



Given this imbalance, one might assume that the margins on new equipment must be much higher and therefore be more significant driver of an organization's success. On the contrary, new equipment margins typically run between 15-20% with some reaching as high as 40%. Compare that to the replacement parts segment of the business where 50% is often the bottom end of the range with the upper end exceeding 80% in some instances. Even with the more conservative numbers, an added dollar from the parts business contributes more than double the profit of an additional dollar in new equipment sales.

These differences are substantial, but perhaps this is a revenue stream that is already maxed out? Even if the margins are great, is there anything else OEMs can do here, given that they provide regular replacement schedules and face strict price competition from non-OEM suppliers? In fact, they can! A recent PMMI survey of major consumer packaged goods producers listed Wear & Tear as the number one cause of machine downtime. This combined with unexpected component failure constituted nearly 40% of overall equipment downtime. Two factors that could be dramatically reduced by the timely replacement of wear parts. Implementing digital tools like HubOEM to prompt equipment owner purchases and the streamline the purchasing process can dramatically boost sales and reduce losses to 3rd parties.

PASDM Generates Visibility into Recurring Revenue

If you went back in time 40 years and looked at a list of the top American businesses, you would see a slew of manufacturing titans like Ford, IBM and GE that built large, long-life, one-time purchase items for their respective categories. Fast forward to today and all the talk in the hallways of America's top business schools is about landing a job at one of the FAANG (Facebook, Apple, Amazon, Netflix or Google) companies. These companies have grown to tremendous heights, sometimes with valuations measured in the Trillions of dollars through large portfolios of smaller recurring revenue streams. The story of the nimble subscription model Netflix crushing the once mighty Blockbuster is retold in case studies so often it has become almost cliché.

Large capital equipment sales are long term investments. Many of these machines have service lives of 10 to 20 years or more, often being resold and refurbished on secondary markets long after their original mission is done. While the machine itself is a onetime sale, the sale of parts and service will be required for the machine's entire service life and constitutes a tremendous opportunity for a recurring revenue stream. Many venture capital firms now value companies one-time revenues with a 2-3x multiplier, whereas recurring revenue can be valued with a 3-8x multiplier. This means that even if there is no net impact to a company's overall profit, shifting dollars from the new machine bucket to the parts and service bucket can dramatically boost a company's valuation. This can be even more pronounced in the world of automation equipment as maintaining a steady stream of new equipment sales in the hyper competitive space requires a continued commitment to investment in R&D to maintain market share.

EBITDA Multiple Valuation Method

Multiple (m) = $\frac{Firm\ Value}{X}$ e.g., $\frac{Enterprise\ Value}{EBITDA}$

For the comparable firm

Implied Target Value = m (from comp) * X for target

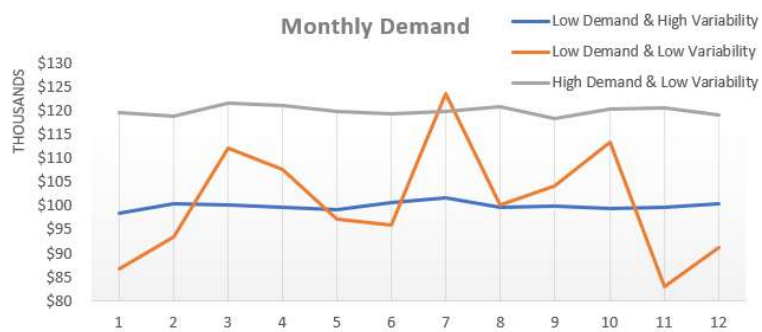
Enterprise Value = price * # shares + (LT debt – (cash + ST investments))

The idea of a subscription model is not a new one in the packaging automation industry. In fact, there is a long history of materials suppliers providing equipment at, or even below cost as part of a long-term agreement to supply packaging materials. Companies without a materials arm are now implementing structured service agreements, akin to buying the extended warranty for your car from the dealership. The structure of these agreements can vary greatly based on the cost and complexity of the equipment with simple agreements just coving annual PM visits to more complex agreements with regular onsite trainings and discounted pricing on certain parts and consumables. Coupling these types of structured agreements with digital customer service portals like HubOEM, automated and predictive ordering further reduces the friction in the after sales process. The net result is a more consistent and predictable plan for both OEM and equipment user.

PASDM Reduces a Firm’s Working Capital Requirement

Going back to the 1980s and the Toyota lean management philosophy, inventory has long been vilified as one of the seven “great wastes”. There are plenty of reasons inventory gets lumped in right next to defective product as a prime target for process improvement. It costs a lot to house, the more you have the more labor you need to manage it, and even in comparatively non-perishable products like machine parts, you will lose a certain percentage due to accidental damage or obsolescence. Despite its prolonged history as an operational boogieman, many small to midsize OEMs carry 5-10% of their annual earnings in on hand inventory. Recent breakdowns in the global “Just in Time” supply chain have caused those values to grow. While there may be no short-term solution for variability in supply, this can be at least partially offset by more reliable forecasts.

Scenario	Average Demand (Dollars)	Standard Deviation (Dollars)	Required Stock Level
Low Demand & High Variability	$ 100,000	$ 10,000	$ 123,263
Low Demand & Low Variability	$ 100,000	$ 1,000	$ 102,326
High Demand & Low Variability	$ 120,000	$ 1,000	$ 122,326
		Service Level	99.00%
Difference in Working Capital Requirment			$ 20,937



Implementing PASDM tools and strategies can dramatically reduce the amount of inventory needed to achieve organizations target service level. In addition to lowering operating costs, it has a direct impact on a company’s working capital requirements. This can translate into a year 1 bump in Free Cash Flow maximizing the impact on your company’s valuation. As the firm grows, a well-managed inventory planning system will also decrease the incremental capital to support additional sales. Companies can also benefit from lower market risk premiums as large inventory holdings increase a company’s risk profile. Smaller companies with higher costs of capital will stand to see the most benefit.

Discounted Cash Flow Valuation

$$DCF = \frac{FCF_1}{(1+r)} + \frac{FCF_2}{(1+r)^2} + \frac{FCF_3}{(1+r)^3} + \frac{FCF_4}{(1+r)^4} + \frac{FCF_5}{(1+r)^5} + \frac{TV}{(1+r)^5}$$

Free Cash Flow = EBITDA*(1-t) + D&A*t – Capex – Change in Working Capital

r = Discount Rate = WACC = %Equity*Rate Equity + %Debt*Rate Debt*(1-Tax Rate)

re = Risk Free Rate + Beta*(Market Risk Premium)

TV = terminal value = FCFt * (1+G) / (r-G)
G= Long term average growth rate of the

Nimble is the New Lean

Even if you are not preparing your company for a sale or a capital raise, there is still tremendous value in implementing strategies to optimize your parts sales growth. Management guru Peter Drucker famously said, “if you can’t measure it, you can’t manage it”, and valuation can stand alongside other KPIs like profitability to help assess the health of an organization. The recent disruptive changes to the global economy have shown that companies don’t only need to be Lean, having driven out as much waste as possible, but also nimble with the ability to quickly adapt to changing conditions on the ground. Tighter relationships with customers, solid margins and lighter balance sheets are the three legs of the stool for the modern nimble company.