PRODUCTION IS WEALTH CREATION:

For organizations to be the most financially formidable, the application of flow production (for productions or services) must be focused on the customer. The understanding that production leads demand (Say's Law) is a cornerstone to robust wealth creation.

KEEPING AN EYE ON FLOW

JIM HUNTZINGER

Production is the source of wealth creation. Production is also the physical expression of human ideas and endeavors. The lean business model is the most effective means, both financially and in human action, of applying (investing) each of these traits. A walk through history reveals this inherent truth.

In July 2020, Michele Nash-Hoff wrote an insightful article explaining the importance of Research and Development (R&D) which derives from manufacturing — think investment. Service innovation rests in this very same arena. Think manufacturing production and service production — this is real economics and actual wealth creation.[1]

R&D is critical to industry and a fundamental underpinning of a strong economy, as investment is essential to growing the economy and creating innovative products and services for the marketplace (society). R&D creates better products and services for customers and helps drive industry growth, which helps develop more employment.

Investment in R&D can create more production that drives the economy (selling in the marketplace), which develops job growth, returns more capital for further investment, and begins the cycle again. It drives financial capital and human capital, and both support the other. This is an aspect of Say's Law in action and practice. Fundamentally, Say's Law is acknowledging that production proceeds demand. Say's Law's namesake, the 18th century French economist, Jean-Baptiste Say, articulated it in 1803:

> It is worthwhile to remark that a product is no sooner created than it, from that instant, affords a market for other products to the full extent of its own value. When the producer has put the finishing hand to his product, he is most anxious to sell it immediately, lest its value should diminish in his hands. Nor is he less anxious to dispose of the money he may get for it; for the value of money is also perishable. But the only way of getting rid of money is in the purchase of some product or other. Thus, the mere circumstance of creation

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of one product immediately opens a vent for other products.[2]

The great British economist, David Ricardo, supported and reiterated Say's Law in his classic 1817 book, *Principles of Political Economy and Taxation*. He states, "No man produces, but with a view to consume or sell, and he never sells, but with the intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production. By producing, then he necessarily becomes either the consumer of his own goods, or the purchaser and consumer of the goods of some other person." Ricardo continued supporting Say's notion that capital will not remain in a country or in ventures which are not productive when it can be moved to superior production and profit.[3]

Think investment is R&D that derives out of manufacturing, developing the ability to create and supply customers with more, better, less expensive, and quicker products and services. In the competitive market, this creates more market share, higher margins, and increased knowledge and experience, which all can feed back into an organization to further this cycle. Consequentially, a win-win-win-win scenario emerges — for the customers, owners, employees, and the surrounding supply base (which also benefits its own group of customers, owners, employees, and supply base).

Australian economist Steven Kates explained Say's idea, "Spending does not of itself create growth and employment. You cannot make an economy prosper through expenditure, *only through value adding production*. Demand does not drive an economy forward, nor does demand deficiency cause recessions." This principle is enhanced by the lean business model. Dr. Kates noted the critical aspect of value adding production. The lean business model, with its emphasis on efficient flow, focuses on resources (such as capital equipment, labor, suppliers, management, etc.) while consuming as minimal resources as possible to get the product or service (production) to the customer at the highest quality, shortest time, and lowest price. Hence lean's obsessive focus on customer-centric value add.[4]

From this proposition, demand will follow. According to Say's Law, production, particularly good and effective production, leads to demand. In addition to the Toyota Motor Corporation, there have been a variety of organizations in multiple industries over the past three decades that have illustrated these principles and practices in much of their business performance. These lean organizations have greatly improved performance and financial return. Many of these companies have shared their stories and lessons (successes and failures) at the annual Lean Accounting and Management Summit.[5]

Executing lean accounting methods effectively builds further revenue which can be invested back into the organization to even further grow and enhance production (product development, production development, market development, etc.), which in turn runs the cycle of Say's Law. Additionally, salaries and hourly wages can and will be increased, which will drive savings and the proliferation of capital to other organizations. This is how economies grow and how individual wealth increases. "It does simply because savings and investment, not consumption are the true drivers of economic growth," notes Real Clear Markets editor John Tamny. "Entrepreneurs cannot innovate, and companies can't grow or be founded without savings first."[6]

According to Ricardo, "It is through the inequality of profits that capital is moved from one employment to another."[7] The inequality of profits is why Wall Street exists. Wall Street does *not* create wealth, it only *aids* in the movement of capital to places of better employment of production. Tragically, many leaders of organizations lose sight of their mission and purpose of production and productivity to create value, that is, to create wealth. Their behavior also becomes confused; for example, the financial industry behaving as if they create wealth instead of helping to move capital to entities that are supposed to create wealth. To better serve our organizations, communities, society, and ultimately ourselves, it behooves us to always keep this in mind. "[Commerce] traverses the earth, flies from places where it is oppressed, and stays where it has liberty to breath," wrote the great Enlightenment philosopher

THINK INVESTMENT IS R&D THAT DERIVES OUT OF MANUFACTURING, DEVELOPING THE ABILITY TO CREATE AND SUPPLY CUSTOMERS WITH MORE, BETTER, LESS EXPENSIVE, AND QUICKER PRODUCTS AND SERVICES.

Charles de Montesquieu, who directly influenced our Founding Fathers.[8]

Certainly, we must invest wisely and in service to our customers. We must have a mission on productivity, creating value by supplying products and services quickly, cost-effectively, and of high quality.

Henry Ford intuitively understood these principles. Ford's Highland Park Plant was the zenith of the accumulation of practices and principles that emerged from the American Industrial Revolution and the original example for today's lean business model. Ford realized that value creation for the customer, or creating wealth in service to your fellow man, was the highest purpose of business and industry. In his book, *Today and Tomorrow*, he states "When the chief function of any industry is to produce dividends rather than goods for use [production], the emphasis is fundamentally wrong. The face of the business is bowed toward the stockholder and not toward the consumer, and this means the denial of the primary purpose of industry."[9]

TOYOTA'S USE OF HIGHLAND PARK'S FLOW CONCEPT IS THE MANIFESTATION OF LEAN WHICH WE SEE TODAY.

As Henry Ford pioneered and lean organizations continued to practice and develop, the practice of flow, of both products and information, became key to generating further wealth in order to not just cover costs of doing business but also to generate the ability to invest in production. Henry Ford did this very well at his Highland Park Plant, home of the Model T, for many years where he constantly invested in his production at a rapid pace. As a result, he generated immense wealth, setting a stunning landmark (at that time in history) for wages. He invested in both equipment and human capital. Incidentally, investment in equipment and construction capital is really investing in human capital as equipment, and facilities are *always* the result of human ideas and labor.

The lessons of Ford's Highland Park Plant, its concept and use of flow, was the baton which Toyota would seize and over time employ in their operations and overall business. Toyota's use of Highland Park's flow concept is the manifestation of lean which we see today.[10]

Keeping an eye on flow in a lean perspective can drive an organization toward further innovation and improvement in production, which improves return financially and in market share, further improving both margin (more retained capital for investing) and volume (demand).

With more retained capital, investment can proceed, which increases demand and furthers the cycle. The use of flow of process and information in the lean business model accomplishes this growth better than any business model yet devised (notwithstanding overall good management practices included). Lean accounting practices support informational flow with more accurate information for better decision-making, thereby leading to improvements and innovation of production and development (product production).

From Say's perspective, products are paid for with products, and a glut (too many products) can take place only when there are too many means of production applied to one kind of product (excess capacity utilized toward a specific product or product family) and not enough to another. Essentially, producers are not listening to the market properly to adjust their capacity output to products and services that give value to the market.

This is also where the lean business model plays an extensive role. Lean process development applies only a minimum amount of capital (equipment and labor) to producing a product — only what the market desires and only in the exact amount the market demands. This is the true application of flow processing, meeting the market directly. Understanding and applying lean process development (in conjunction with lean product development) will typically cut the needed equipment and labor capital in half, which frees up capital for other production or for savings.[11] It also allows for incremental capital outlay if further demand occurs or prevents excessive capital outlay and overcapacity, which has an extremely detrimental effect on the overall management of an organization and creates unnecessary excess consumption of capital.

Furthermore, and in the case of an economic downturn, while the market adjusts to misproduction and malinvestments, the market will adjust reasonably rapidly if left uninhibited. However, at the same time, currency loses value (or, at best, has idle value), which means it is perishable unless, it is either earning interest as savings where it can be utilized as capital for someone else, reinvested into another capital project, or used to purchase a product or service that brings value and places it into the hands of someone else. When an individual produces a product or service, he gets paid for that work and is then able to use that pay to demand other goods and services. Not only does this articulate Say's viewpoint, but it is the very behavior exhibited by the lean business model within a free-market — high-value products and services delivered with rapid velocity through the marketplace while utilizing minimal resources and continuously improving in all aspects of quality, delivery, costs, and value.

For organizations to be the most financially formidable, the application of flow production (for productions or services) must be focused on the customer. The understanding that production leads demand (Say's Law) is a cornerstone to robust wealth creation. The combination of applying and understanding these attributes (one being an economic understanding and the other being a business model understanding) will lead organizations to be the best they can be and launch them into a continuous state of learning and growing in knowledge, experience, and success. So, think investment is the best investment.

Being experienced and effective in lean practices, business, and production gives you a significant advantage over your competitors. Combining experience with an understanding of how these practices historically enhanced investment, in both human and financial capital, will give you a competitive advantage unmatched in the market. ■

NOTES

1 Nash-Hoff, M., "Manufacturing is the engine of American technology development and innovation," Savingusmanufacturing.com (July 8, 2020) (blog). Available at: https://savingusmanufacturing.com/blog/manufacturing/manufacturing-is-the-engine-of-american-technology-development-and-innovation/.

2 Say, J., *A Treatise on Political Economy*. (New York: Augustus M. Kelley, Publishers, 1971).

3 Ricardo, D., "Chapter XIX, Effects of Accumulation of Profits and Interest," *Principles of Political Economy and Taxation*. (Lexington, KY: Maestro Reprints, 2012).

4 Kates, S., Why your grandfather's economics was better than yours: On the catastrophic disappearance of Say's Law, *The Quarterly Journal of Austrian Economics* 13, no. 5 (2010): 413–428.

5 Womack, J.P. and Jones, D.T., *Lean Thinking: Banish Waste and Create Wealth in your Corporation*. (New York: Simon & Schuster, 2003).

6 Tamny, J., "Dear Keynesians, last week's GDP 'catastrophe' mocks your dopey religion," Real Clear Markets (Aug 4, 2020). Available at: https://www.realclearmarkets.com/articles/2020/08/04/dear_keynesians_last_weeks_gdp_catastrophe_mocks_your_dopey_religion_500878.html.

7 Ricardo, D., "Chapter XIX, Effects of Accumulation of Profits and Interest," *Principles of Political Economy and Taxation*. (Lexington, KY: Maestro Reprints, 2012).

8 Montesquieu, C., "Book XXI: Of laws in relation to commerce, considered in the revolutions it has met with in the world," *The Spirit of the Laws*. Cohler, A.M., Miller, B.C., and Stone, H.S. (Eds.), (Cambridge, UK: Cambridge University Press, 2010).

9 Ford, H. and Crowther, S., *Today and Tomorrow*. (Portland, OR: Productivity Press, Inc., 1988).

10 While there were a variety of practices used by Toyota to develop the Toyota Production System and the Toyota Way, the concept and practice of flow was the most far reaching and impactful.

11 Huntzinger, J. and Zayko, M., Unleashing wealth creation: Financial dominance through building lean product and process development capability with your people, *Cost Management* 32, no. 4 (2018): 25–30.