One of my strategies for assisting printing, publishing, packaging, and related companies in preparing for future success is to advise on how to use the past to improve the present and prepare for the future.

This paper focuses on strategies using events of the past, and sometimes centuries ago, to help form strategies for the present and future printing industry. Consider the often-used metaphor, “History is the widow on the future.” Consider that The Great Books of the Western World continues to be the tomes of history advocating the philosophies and advice of the world’s greatest thinkers. “What’s past is prologue” is a quote from William Shakespeare in his play, The Tempest. This means that the past is a great indication of what the future brings. Confucius said, “Study the past if you would define the future.”

Wynkyn De Worde
This essay is an anecdote about a widely unknown but wise strategist for the printing industry, Wynkyn De Worde (died c. 1534).

He was excited! As he raced back to the printing office on Fleet Street through Shoe Lane in London, Wynkyn de Worde ran into Noel Havy (aka Nowell) his bookbinder colleague. “It’s official, I have been commissioned to print the The Shippe of Fools.” I will be needing you to assist in the binding. I will know more in the next several days.” Havy nodded, and Wynkyn dispersed quickly. Upon his arrival at the printing office he directed his apprentices to take inventory of his type sorts—all meticulously stored in a type-case. “We will need a full set of Type 8 of our Black Letter fount. We must prepare this and organize it accordingly.” The year was 1509 and it proved to be quite a busy and profitable year for Wynkyn de Worde. After all, he had his printing company, bindery business, and book selling venture all taking off at an unprecedented speed. As an entrepreneur, he took calculated risks; however, he understood business. And, more importantly, he understood the market and the need to manufacture customized products in a mutually acceptable schedule that was faster than his competitor.

The First English Blue-Collar Printer
Wynkyn de Worde is, what I would call, the first English blue-collar printer. Born in Flanders (today known as Belgium), a Dutch speaking community, De Worde was hired as a young apprentice by William Caxton to bring the printing press to England in the year 1476. Caxton, a prominent aristocratic textile merchandiser and entrepreneur from England who, while working in Cologne, befriended Ulrich Zell (a contemporary of Gutenberg, Fust, and Schöffer) and, together with De Worde, learned the crafts of type-making, typecasting, and printing. At the time of the opening of Caxton’s press in Westminster Abbey, near London, England, Caxton was already in his 50s. Thus, Wynkyn de Worde oversaw most of the production and essentially ran the entire operation. Upon Caxton’s death in 1492, and after a long three-year litigation process, De Worde inherited the shop and remained in the same location under Caxton’s name from 1495-1500. In the year 1500, De Worde, having an entrepreneurial vision with regards to the sales of books, moved his printing office onto Fleet Street near St. Paul’s Cathedral that was quickly becoming the primary hub for book sales in all of United Kingdom.

De Worde became known as “the popular printer” and, in his time of business, produced over 800 titles of books, and additional ephemera, bulls, indulgences, and pamphlets in many varied traditional and non-traditional genres. As a non-pedigreed general laborer who became a successful entrepreneur, his story resonates loudly with contemporary culture. In its infancy, the craft of printing came with great financial burdens, i.e., investing and procuring quantities of

1 Henry Plomer. Wynkyn De Worde and His Contemporaries from the Death of Caxton to 1535 (Kent, England, Wm. Dawson & Sons, 1974). 70.
2 Ibid. 7.
3 Ibid. 8.
paper, ink, metal for the manufacturing of type, contracting labor, binders, illuminists, and, selling the completed works within markets in order to recoup investments. Sometimes, by not often, a benefactor would provide money for “start up costs” in order to defray the burden. Only those affiliated with aristocracy could benefit from such commissions.

As an astute businessman, however, De Worde strategically maneuvered his portfolio of talents through the obtaining of smaller printing jobs, book sales, and omni-sourced printing and binding projects. Additionally, understanding that the printing revolution was not to just benefit the aristocracy, academics, or the church, but also the common people, he printed books and materials geared towards their vernacular, interests, and humor. And, he philosophically committed himself and his printing operations to continuously improving through analyzing and adjusting processes, studying organizational settings, and the human interactions contained there within.

**Not an Artist or Designer—A Printer**

De Worde was not an artist, nor was he keen on design. He had inherited William Caxton’s Type collection consisting of several versions of Black Letter (English) Gothic *Lettre de Forme*. Keeping in mind that this was the beginning of letterpress printing, there were few fonts to be used and selection was minimal. He was, however, really one of the first early printers to incorporate graphics in the form of hand-carved wood engravings that he commissioned artists to design and produce. Admittedly, he had only a few for which he used repetitively in many of his printed works.

**A Window on the Future**

At this time, the job or type case, was essentially the first form of visual management and an applicable example of what is known today as 5S—the highly acclaimed first executable phase of Lean Manufacturing (based on Toyota Production System). Recognizing that typesetters (those that composed the letters into text and lines) needed to be able to easily locate type for composing, the job case (type-case) became instrumental in establishing production regimens to yielding enhanced turnaround. As such, the case was built on a raised platform and allowed for the placement of two trays of sorts from which the compositor could set the type. Initially, the upper case contained a larger font size for setting headlines and/or woodcuts for initials to indicate new pages or paragraphs. The lower case contained the main font chosen for the body of the text for each work. Each case was arranged as such so that common and repetitive letters could be most easily be grabbed without effort, whereas, minimally used letters would remain on the outer periphery (i.e., Z, Q, P, W, etcetera). In wasn’t until well into the 17th century the upper case was earmarked for capital letters, and the lower case, for non-capitalized letters.

In the early printing years, traditionally, the printing master (the owner) would undertake the tasks of setting and composing type and generating each sheet of output from the printing press. Additionally, at this time, it was tradition for the printing establishment to create its own type through the design and carving of steel punches, and then punched copper matrices for pouring lead and manufacturing each sort. As the production process improved over the years, similar to that of a current “Lean-friendly” printing plant, tasks were divided into specialties in which the workforce was trained in specific crafts. According to Joseph Moxon (1683), who wrote the first essential detailed standard operating procedures handbook for what was then called the printing trades, *Mechanick Exercises: or The Doctrine of Handy Works applied to the Art of Printing* (London, England), there were two teams of specialists employed within the printing house at that time: founders and printers. The founders were responsible for manufacturing type and consisted of: 1) the Letter-Caster, 2) the Letter-Caster, and, 3) the Letter Dresser. Similarly, on the press production side, there contained the positions: 1) the Compositor, 2) the Corrector, 3) the Pressman, and 4) the “ink-maker.” As referenced in great detail in Moxon’s book, the tasks for each of these integral positions are highlighted as such, and exhibit the processes required to expedite printing production in adherence to customer demand and quality tolerances. This would be considered the predecessor to standardized work initiatives executed in plants today.

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6 Ibid. 12.
Henry Plomer (1972) writes of De Worde, “[he] was content to remain the mechanic. He was in no sense a scholar, and knew very little of the literary value of books.” And yet, James Moran (2003) attributes Wynkyn de Worde as “the first publisher and printer to popularise the products of the printing press and by far the most important and prolific of all the early English printers.”

**Contributions to Today’s Printing Industry**

Wynkyn de Worde’s contributions to the contemporary printing communities of today have been lost. At a time when printing, as a craft, was in its infancy, De Worde arose as a budding entrepreneur monitoring the pulse of his (potential) customer base and finding ways to outperform the competition. Today, as more and more printers chase print work in highly contested and competitive space, having a competitive advantage is key.

Reflecting on the wisdom of Wynkyn de Worde, we can deduce that our competitive advantage falls upon our very own print production floors—in finding waste(s) [TIMWOOD] within our production processes and value streams. Understanding and establishing effective “takt” times that are comparable to accepted cycle times and enhanced lead times is essential in strengthening customer demand.

In sum, “takt” time is the rate needed to complete a product in order to meet customer demand. Coming from the German word “takt,” (meaning beat or pulse in music), it is a well-known term in Lean manufacturing. Inevitably, a competitive advantage comes from understanding of customers and their needs. Wynkyn De Worde chose to run against the grain of his contemporaries in printing works more conditioned to him and the common person. “The man in the street preferred to buy trifles,” writes Plomber, “such as ballads or jest books, and those of the cheapest kind, to more solid literature.”

To successfully venture forward in uncontested market space requires heavy customer intelligence through research, integrated innovative technology, a complete and thorough understanding of value streams (current state analysis and mapping), and a trained and dedicated workforce that is willing go the distance—just as Wynkyn de Worde did back in 1501.

**Today’s Business Environment**

Today’s business environment is hauntingly similar to Wynkyn de Worde’s world, in that, we, too, are starting anew. In the new Industry 4.0 platform, digital printing technologies coupled with artificial intelligence (AI) are more than just buzzwords. The frictionless, streamlined, cloud-based production milieu is here and will inevitably “knock on your door” within the next five years. Only companies and organizations that understand their capabilities (internally) and their customer base (externally) will navigate the foreseen horizon. So, we shall, once again refer to history and consider “what Wynkyn would do and recommend?” Spend some time getting to know:

• **WHO** you are.
• **WHERE** you are [current state, trained workforce, philosophical directives, vision].
• **WHO** your customers are.
• **WHAT** they need.

Albeit, a lot has changed technologically, politically, economically, financially, and culturally since De Worde’s day, i.e., we are no longer casting and setting type and pulling levers to output paper in which to hang and dry. However, we chase the same capitalistic dream that beckoned De Worde for his entire career…to generate a decent living that contributes to the financial welfare and adequately provides for our family’s needs. Wynkyn de Worde “gave the public what would either move it to tears or laughter, cure its ailments both of mind and body, show it how to fish, to hawk, or to cook, or teach it how to speak Latin correctly.” Now, I don’t know about you; however, given that this is the summer of 2021 and all that we have most recently endured, all of that sounds pretty good to me. Except, maybe for that Latin part. A toast to Wynkyn de Worde! He was ahead of his time, but taught us the importance of Lean and efficient production, effective marketing, the entrepreneurial spirit, and to value good and compassionate employee and customer relationships.

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8 Plomer. Ibid. 66.
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