A Brief History of an Acquisition that Failed: The Kent Manufacturing Corporation

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By the mid-1950s Thomas & Betts had established itself as a respected manufacturer of quality conduit fittings for the construction and maintenance market [1]. It had earned five Army-Navy "E" awards for its war production. One of its chief executive officers had served as head of the National Electrical Manufacturers Association in the 1940s and another would become head in 1959. As the Korean War wound down, Thomas & Betts' managers became concerned with what they viewed as a potentially significant change in the electrical market, a change that could prove detrimental to the company.

One of the company's competitors, AMP Inc., introduced a machine for automatically attaching electrical terminals shortly after World War II. This machine had the capacity to attach small terminals (similar to Thomas & Betts' Sta-Kons) to wires at the pace of a machine-gun. AMP's terminals came in a strip on a large reel which was fed through the machine, so they became known as strip-fed terminals. For original equipment manufacturers (appliance, automotive, telecommunications) who repeatedly attached the same size terminal to the same size wire, strip-fed terminals could be attached a great deal faster than single-piece terminals, which were attached with a hand tool. In addition, strip-fed terminals used less material. Thus, it legitimately could be argued that strip-fed terminals had a lower installed cost for high-volume users than singlepiece terminals like Thomas & Betts' Sta-Kons. The company's managers were worried that Sta-Kon terminals and installation tools, the company's most profitable items in the 1950s, would lose market share as automatic installation found more and more applications. The development of the Sta-Kon represented a long-term success based on both creative engineering that became involved with the technology at an early date and wise management that understood how to distribute and market a new product. The company's adventures with terminal attaching machines, the story of the Kent Manufacturing Corporation, represents the converse.

Thomas & Betts' concerns over Sta-Kon's market share did not develop until several years after the introduction of terminal attaching machines. AMP marketed its machines direct to original equipment manufacturers (OEM), a market in which Thomas & Betts had little experience and little presence. The company had sold, and continued to sell, a very small number of Sta-Kons to the

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OEM market through its network of electrical distributors, even though most OEM firms had the market power to demand direct sales. The vast majority of the company's business was with the construction and maintenance market, one that generally operated through electrical distributors. Thus, Thomas & Betts' managers did not become concerned until another competitor, Burndy Corporation, introduced a machine which it planned to sell through electrical distributors rather than direct to the end user. Thomas & Betts' managers worried that if Burndy were successful it might erode Thomas & Betts' share of the single-piece terminal market and reduce the effectiveness of the company's network of electrical distributors, which they had worked to develop. As will be argued, Burndy failed to understand the nature of the market for such machines, as did Thomas & Betts.

There was no significant direct competition between strip-fed and single-piece terminals until the mid-1950s. Following the introduction of Burndy's machine, feedback from Thomas & Betts' sales force revealed few customers who were trying it. The majority of Thomas & Betts' customers, firms in the construction and maintenance market, were satisfied with single-piece terminals, but that was not clear at the time. Thus, the attempt to protect the distributor network by directly competing against the strength of a rival firm in an unfamiliar market contributed to one of Thomas & Betts' least successful ventures. Fortunately, the story is not without a silver lining. The lessons the company learned with respect to the OEM market were put to good use later in the development of its electronics business.

Upon becoming Thomas & Betts' Chief Executive Officer in 1951, Nestor MacDonald asked in what other markets the company's products would fit. One obvious answer was the OEM market. The Sta-Kon line was one which MacDonald and the firm's managers believed could be sold to the OEM market, but they were concerned that those manufacturers would require the Sta-Kons to be installed automatically. AMP was marketing its automatic terminal machine as early as 1946, but the machine initially met with considerable resistance [3, pp. 185-93]. For the most part, AMP rented these machines to its customers since they were expensive to construct and costly to service. This put AMP in the position of being able to sell large quantities of strip-fed terminals to firms using application machines to which AMP retained title. It is unclear whether AMP recognized before the fact the market advantage this rental arrangement provided. It proved to be an important strategic marketing advantage. With technological improvements that further decreased installed cost, OEM producers increasingly utilized strip-fed terminals, and AMP's advantage became extremely clear after the fact to the firms that attempted to market machines in competition with AMP.

Based on their extensive knowledge of the construction-maintenance market, the initial reaction of Thomas & Betts' managers to the new technology was that it made little sense. They viewed it as teaching customers how to make their own terminals. To Thomas & Betts, customers were firms that purchased, or could purchase, the company's terminals through electrical distributors. While those managers no doubt realized that customers for strip-fed terminals and attaching machines were most likely to come from the OEM market, they expected to handle this business through their normal distribution channels. Thomas & Betts' allegiance to the T & B Plan, wherein it would only sell through electrical distributors, proved to be a constraint with respect to the OEM market.

Electrical distributors normally did not install and service rental machines. At a time when only a few machines were in existence and the technology was improving rapidly, these were not tasks the owner of a machine normally would ask a third party to perform. Any attempt to involve electrical distributors in the sale, installation, or repair of machines was likely to result in a less than satisfactory situation. Most electrical distributors were not equipped to handle the application machines or the large reels on which the terminals came. Most distributors did not make sales calls on the design engineering departments of large users. Yet when one or two of Thomas & Betts' major distributors also began stocking terminals to be used with Burndy's machine, Thomas & Betts quickly determined that it needed a competitive product to protect its distributor base.

The engineering of such machines also proved to be a problem. This was not an avenue Thomas & Betts had explored of its own volition. When the threat to the firm's distributor base seemed most severe, engineers were hired in an attempt to develop a competitive product internally, but it was soon clear that this approach would involve too much time. The fastest way to acquire the technology was to purchase a firm that had developed it in competition with AMP and Burndy, but Thomas & Betts had no experience with acquisitions. Thus, the company's managers hired a market consultant to analyze the strip-fed terminal market. The consultant was to address such issues as the size and location of the market and whether it could be served through the company's existing distributor network. As an economy measure, the consultant limited research to the East Coast. This proved to be a costly mistake. The basic OEM markets (automobile and appliances) were located largely in the Middle West.

An even more important mistake was the failure to understand that the strip-fed terminal market was not one that could be served through Thomas & Betts' distributor network. OEM markets, in general, require a close working relationship between producer and consumer. Consumers typically order a large number of terminals, and those orders have to be filled in a timely fashion so as not to create production problems for the customer. The attaching machines have

When Thomas & Betts began to market such machines on a rental basis through its distributors it was forced to assume control of the rental arrangement. The pricing structure was such that a firm had to use approximately a million terminals a year to make this approach viable. At that time, neither Thomas & Betts nor its salesmen kept records detailed enough to advise a customer when it was appropriate to adopt the machine technology.

to be maintained for the same reason. Finally, the producer's engineers have to work closely with the customer's designers as new products are developed and special terminals are required. Thomas & Betts had no experience with this type of relationship. The company's strength in the terminal business was in the construction and maintenance market which did not require this kind of communication. Thomas & Betts' marketing information came generally from its distributors. Company salesmen rarely talked to the OEM consumer. The company lacked a basic understanding of what was required to make a success of strip-fed terminals and attaching machines.

The consultant's report concluded that the strip-fed terminal market was an important one for Thomas & Betts to enter, and it did find a likely candidate for acquisition, the Kent Manufacturing Corporation of Newton, Massachusetts [first mentioned in 4, 24 July 1957]. Founded by inventor Hugh W. Batcheller in 1956, the Kent company consisted of a cleverly-designed machine for attaching terminals to wire, very small sales, and almost nothing else. As a result of an agreement dated 17 January 1958, Thomas & Betts purchased all the outstanding shares of Kent stock for \$90,580 and the assets of the Kent Manufacturing Corporation for an additional \$80,000. Furthermore, Thomas & Betts guaranteed an employment contract between Kent and Hugh Batcheller and a lease from Batcheller to Kent of its Newton property at a rate of \$2,000 per month [5, 28 April 1958, also see 20 November 1957].

Thomas & Betts was outwardly optimistic about the acquisition. The initial marketing of Kent terminal-attaching machines in 1959 (with the "Wire-Dial" as the featured item in the line) was hailed in the company's first public Annual Report as "another important step forward." The following year, Thomas & Betts' stockholders were informed that the Kent organization was "considerably enlarged in answer to growing customer demands for its expanding product line" and that improvements in the Wire-Dial machine "proved to be the year's outstanding advance in the art of terminal attachment, and has given us a fine competitive sales advantage" [4, 1959, p. 6; 1960, p. 8]. Such public declarations proved unwarranted as events unfolded.

It soon became clear to Thomas & Betts' managers that its single-piece terminal market had never been in danger and that the company did not require terminal-attaching machines and strip-fed terminals to protect its distributor network. Why electrical distributors initially accepted responsibility for these machines is unclear. In short, the assumptions underlying the defensive strategy that motivated the acquisition of Kent proved false. Kent was an inappropriate and unnecessary end toward accomplishing the company's intended objective. The construction-maintenance market did not make enough terminations on a daily basis to make a machine like the Wire-Dial attractive in the first place. Kent's product orientation and sales effort were directed from the start toward the OEM users of smaller numbers of terminals, and the few sales Kent had made on its own were direct sales. The Wire-Dial and other Kent machines were

designed for users who desired flexibility with respect to wire sizes (e.g., small appliance manufacturers). The AMP machine typically was designed specifically for the user of a large number of terminals. It had a single setting which is all the customer required.

It became clear that such special engineering (of both machines and terminals) would be required to be successful in the OEM market. This proved to be a bottleneck in that Thomas & Betts' managers thought of production in terms of standard, not special, items with lengthy development times. Further, the internal engineering group the company established when it first began to investigate the strip-fed terminal business had turned its attention to insulated strip terminals that did not attach with one of Kent's machines. Regardless, when the defensive strategy for acquiring Kent proved superfluous, management adopted an offensive rationalization for retaining Kent: to penetrate the OEM market.

As has been discussed, there were several important differences between Thomas & Betts' traditional market and the OEM market. These portended difficulties for Thomas & Betts' attempt to penetrate OEM markets. Unlike the construction-maintenance market, the OEM market typically did not make use of electrical distributors. OEM firms had the market power to demand direct purchase, and AMP and Burndy (which sold both direct and through distributors) accommodated them. Thomas & Betts had designed standard products that were sold to many customers; firms in the OEM market typically developed products for one customer's specific needs. Thomas & Betts engineered the tooling for its products but often subcontracted the manufacturing. Firms in the OEM market typically had the technology to produce what they engineered. Thomas & Betts' salesmen spent approximately one-third of their time selling to electrical distributors and two-thirds of their time doing missionary work among electrical contractors, maintenance firms, and some electrical equipment manufacturers. AMP's salesman called on aircraft, appliance, and automotive manufacturers, as well as other users of large numbers of terminals. Given its orientation to OEM markets, AMP maintained a service organization for its automation equipment, whereas Thomas & Betts had none. Firms selling in the OEM market were of necessity service oriented, while firms selling in the construction-maintenance market provided service to the users of their products by having an adequate supply conveniently available at a moment's notice. Firms like Thomas & Betts produced shelf goods for inventory. Each of these differences created difficulties for Kent. Each represents a lesson Thomas & Betts learned in its attempt to make a success of the Kent acquisition.

The desire to penetrate the OEM market resulted from an ever-increasing awareness of the tremendous growth that was taking place in that market. One immediate indicator to Thomas & Betts' managers of how large that market had become was the net sales reported in AMP's Annual Reports. Yet there was little evidence to suggest Kent's products could effectively tap into the large sales

potential of the OEM market. In spite of the fact that all of its competitors sold direct, company managers, adhering to the T & B Plan, continued to route this new business through the company's distributor network. Thomas & Betts was learning about the OEM market piece by piece, and at this juncture management was unable to assemble the pieces into an identifiable picture. Events would prove that the direction pursued by the internal electronics engineering group, flat electronic cable and connectors, provided a more effective entry into the OEM market than Kent. The lessons the company learned through Kent were utilized in developing the electronics line. The same manager, Edward D. ("Te-d") Thomas, son of G. C. Thomas, was in charge of both Kent and the electronics lines.²

As head of Kent, one of the first problems Ted Thomas encountered was the geographical separation of Elizabeth and Newton. To bridge the distance, production engineers from Thomas & Betts had been assigned to understudy Kent's plant manager in Newton. The company selected production engineers so that Thomas & Betts people could become familiar with the technology, but the company expected more of these engineers. Kent employees were suspicious of the two individuals Thomas & Betts assigned (sequentially) to this position. Neither was accepted as a colleague and one of the engineers felt he was being spied on by the switchboard operator.

A second problem was that Kent's initial marketing attempts under Hugh Batcheller involved direct sales.³ Following acquisition, Kent continued to sell direct under its own brand through factory representatives located in Newton. An individual who once had been involved in the marketing of AMP's machine was hired to head Thomas & Betts' marketing of the Kent line.⁴ As a result, Ted Thomas talked MacDonald into forming a separate sales department for Kent. This sales organization was headquartered in Elizabeth but with a Hillside, New Jersey, address to dissociate it from the parent company. For the most part, the salesmen Thomas & Betts assigned to the Kent operation were company employees who had had some success in selling to the OEM market. These employees quickly learned how inadequate Thomas & Betts' knowledge of OEM markets was, but they learned a great deal about OEM business. While Thomas & Betts' then-current managers had little experience with calling on OEM customers, the

²See [3, 1961, p. 11; and 4, 21 November 1961]. Ted Thomas was elected to Thomas & Betts' Board of Directors for the 1958-59 year and then on a continuous basis beginning in 1962.

Most of Kent's customers were small appliance manufacturers located in small New England towns who needed the flexibility to change wire sizes, which Kent's machines afforded.

⁴The question of separating Kent's operations from those of Thomas & Betts was discussed at several Board meetings. The first mention of this is in [4, 28 February 1962]. The same year the company recapitalized Kent [4, 25 April, 20 June, 28 November, and 26 December 1962].

next generation of managers gained first-hand experience during what was a very frustrating period.

The sales department's first task was to reclaim the Wire-Dial machines from the company's electrical distributors to whom they had been assigned. The distributors did not really want these machines. They were not a fast-moving item and they took up a lot of space. Most distributors were not equipped to handle the servicing the machines required. On the other hand, Kent's salesmen were provided with station wagons that, theoretically, enabled them to handle both sales and service.

Kent's engineering and manufacturing functions remained in Newton after the marketing function, and ultimate managerial control, moved to Elizabeth. Hugh Batcheller, Kent's founder, remained with the company for a time and developed a few new products. He was, however, an entrepreneur, not an organization man. He was a man who preferred his independence, and he was nearing retirement age. Kent's Newton employees remained loyal to Batcheller. Thomas & Betts decided to move the manufacturing and engineering functions out of Newton and to sever its relationship with Batcheller, although the company recognized it would be difficult to replace Batcheller's engineering expertise with respect to his machines. Kent's manufacturing operations were moved to Elizabeth, while the Kent Research Center, housing the headquarters of Kent's operations, was opened in Princeton, New Jersey, in 1962 [4, 1962, p. 11]. Concomitantly, Kent was rechartered in New Jersey and its paid-in capital was increased by \$1 million.

Kent's manufacturing operations did not fit well in Elizabeth because the nature of production was different. Most of the Elizabeth plant was geared to producing large quantities of standard items for inventory. Kent, on the other hand, produced to order. The tool makers in Elizabeth encountered difficulties handling the production dies used in Newton. In addition, Thomas & Betts' factory employees were allowed to bid for the jobs they wanted and the unfamiliar Kent positions were not highly desired. Thus, rather than the loyal Kent employees in Newton, those in Elizabeth preferred to be doing something else. Consequently, after several years of problems and high overhead, Thomas & Betts determined to move the Kent operations out of Elizabeth. Having fought to put the two companies together under one roof, it now appeared to make sense to physically separate them. Having moved the firm from Newton, it had been a mistake to move it to Elizabeth.

⁵In addition, there was a research group at the center doing work on flat electronic cable. It was hoped that there would be some linkage between Princeton University and the research center, but the university's program was much too theoretical for the company's needs.

This paid off an open account and other indebtedness to Thomas & Betts [4, 26 December 1962]. The ncorporation date was 18 December 1962.

Early in the Autumn of 1963, Thomas & Betts' Board of Directors recommended that the Kent Manufacturing Corporation be dissolved and made a division of Thomas & Betts [See 5, 23 September and 28 October 1963]. Before this was approved, MacDonald requested each director to comment on whether Thomas & Betts should continue to operate Kent, inasmuch as its costs were extremely high. The directors were in favor of continuation as long as a cost containment program was instituted [5, 22 November 1963]. As the firm's 1963 Annual Report phrased it: "We count our heavy investment in Kent as a worthwhile investment in T&B's future growth" [4, 1963, p. 3]. Yet there was no long-term thought given to what Thomas & Betts would have to do to succeed in the strip terminal business. Each new concern led to a short-run patching job and Kent's future proved to be little better than its present. It continued to be Thomas & Betts' most unprofitable operation.

The Kent experience, however, proved to be a significant investment in Thomas & Betts' future. By making Kent a separate entity, the company's managers had decided for the first time to spin off an operation and permit it to develop on its own. The association with Thomas & Betts' electrical business was completely severed. Kent was permitted to establish a direct sales organization with its own policies and its own group of customers, subject to the restriction that this would not overlap with the customers to whom Thomas & Betts' products were sold through electrical distributors. MacDonald was now willing to bend the T & B Plan a little as long as Kent's sales effort in the OEM markets did not jeopardize the company's position in the construction and maintenance market. Thomas & Betts was becoming a corporation with multiple entities.

Seeking a fresh start, Kent moved its manufacturing operations from Elizabeth to the Middle West (Mundelein, Illinois) in the late 1960s to be closer to the center of its appliance and automotive markets [4, 1968, p. 4; 5, 28 May 1969]. It was, however, too late to have an impact. After many years of deliberating whether to keep Kent, and many attempts to make it a successful part of the company, a decision to sell Kent was imminent. The market it had been acquired to defend had never really been in danger. The OEM markets into which it was supposed to assist entry had been opened through an alternate route. Even though Kent had attracted some additional people from AMP and other firms, developed some new product lines, and contained costs more efficiently than in its first few years, the learning process had been long and slow. Kent's competitors had pulled far ahead by following the strip-fed terminal business into electronics as that field advanced. Kent did not. In particular, AMP continued to be the dominant firm in the strip terminal market, and there were many more suppliers of strip-fed terminals than there had been at the start. Further, there was no evident customer dissatisfaction with AMP's product line. There was no evident demand for what Kent was supplying. It was unclear at best how much money would be required to make Kent's operations successful

It was also irrelevant. The expected rate of return on that money in other operations was much higher than in Kent.

The precipitating factor proved to be a competitive decrease in the price of what had become Thomas & Betts' most profitable item. This forced the company's managers to consider ways in which they could streamline operations. Their first step was to offer the Kent assets for sale. In the Summer of 1970, Thomas & Betts, now under the leadership of Robert Thomas Jr., began discussions with Microdot Incorporated for the sale of the Kent assets and the Kent name [5, 28 July 1970]. The company had done all it knew to do with Kent, as it ultimately would do with all its acquisitions. Agreement was reached the following June with Malco Manufacturing, Inc., a subsidiary of Microdot, to purchase the major portion of Kent Corporation. Microdot, as Thomas & Betts before them, was unable to make a success of Kent. With the sale of Kent, Thomas & Betts incurred an extraordinary charge of \$514,000 net after taxes, the only such charge in the company's history [4, 1971, p. 6].

The total cost involved in trying to make a success of Kent was much greater than the extraordinary charges the company officially incurred. For most of the brief twelve years during which Thomas & Betts owned Kent, a period which seemed much longer to those involved, the company had attempted to compete against its rivals' strength with self-imposed constraints. Further, Kent suffered in the allocation of engineering funds between automation equipment and electronics. This proved unfortunate. The strip-fed terminal business was emerging as the key to the multiple-connect electronics industry, one of the OEM markets with a large sales potential. 11

⁷These discussions continued for some time; the minutes report on them almost monthly. Kent's joint venture with Fukusuke Corporation in Japan also was terminated, and Kent's interests in that venture were offered to Microdot. See [4, 23 December 1970].

⁸This included Kent-Ansley (Canada) Limited [4, 30 June 1971]. Approval for Microdot to purchase the K-3 strip terminal product line for \$110,000 is contained in [4, 25 August 1971]. Microdot also purchased (for \$110,000) assets Kent held in Japan. Approval is in [4, 27 October 1971].

One of the company's current senior managers, who was involved with this episode and who knew the business philosophies of the then senior management, termed Bob Thomas' decision to sell Kent "courageous."

¹⁰ Thomas & Betts initially established a reserve of just under \$1 million in relation to the sale of Kent. A reserve also was established against the Kent inventories consigned to Microdot. Six months following the sale, almost 80% of the \$1.2 million inventory remained unsold; the reserve had been calculated under the assumption that less than 60% would never be sold [4, 5 January 1972].

¹¹ Burndy also sold its terminal attaching machine business but then reentered that business when the electronics applications appeared.

Thomas & Betts' experience with Kent, however, cannot be considered a total loss. The attempt to cope with Kent forced the company's managers to recognize the future sales potential of the OEM market. It forced them to recognize that successful strategies in the construction and maintenance market did not necessarily commute to the OEM market.

As Thomas & Betts moved away from being a single entity, the managerial structure that had served it well was severely stretched, especially because of the desire to protect the T & B Plan, the relationship between The Thomas & Betts Co. and its electrical distributors in the company's traditional market. When Thomas & Betts' salesmen made their initial calls on potential users of Kent machines, they discovered how inadequate the company was in relation to the needs of the OEM market. They also discovered that product development in the OEM market required engineering involvement with customers, and this was all the more critical when the market was changing as rapidly as it was during the 1960s. Thomas & Betts had to change, and the Kent experience forced the company's managers to consider what the company should do. Many employees learned a great deal about the OEM market on a first-hand basis, and clearly it was not a market the company could ignore. By the early 1970s, when the electronics market became more standardized (fewer special items), these lessons were put to good advantage in making successful inroads into the OEM market. 12 While Thomas & Betts never made a competitive success of Kent, the company had learned a great deal about what it took to be competitive in what had theretofore been an unfamiliar market.

References

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¹² This essay is based on Cain [2, ch. 13]. The company's ultimate success is discussed there.