The History of Industrial Distribution at Texas A&M University

Bringing Students and Industry Together
The Industrial Distribution Program has had quite an illustrious history. As faculty members, we have taken great pride and enjoyment in our involvement with the Program and the many dedicated individuals who made it what it is today. This history was difficult to write because it was impossible to name and tell the stories of all the wonderful people who have contributed to the Program. We chose, instead, to tell the most remarkable part of the story: the connection between the ID Program and the industry that created and has supported it throughout the years.

We limited the names and individual stories to those cases where the actions involved changed the direction of the Program immeasurably. Large gifts, the founding of the Read Center, the development of the Professional Association for Industrial Distribution are but a few of the events we tried to report. Ultimately, our goal was to show how industry driven education can change the University and contribute to the success of our students.

To our many colleagues who gave so much to the Program, we thank you and are honored by your commitment. Although your stories may not always be included here, rest assured they remain in the hearts, culture, and future of the ID Program. Many great teachers have blessed this Program and, as former students read this history, they will no doubt reflect on your contribution to their lives.

We would be remiss, however, if we did not mention one singular contributor to the ID Program that is difficult to understand from the outside looking in. The Academic Advisor position is rather unique in a single program and the ID Academic Advisors have made a significant contribution to the Program’s success. Since the day Terri Burger took on the position, she and her successors have always been one of the closest connections between the industry and our students.

To write such a history is a humbling task. The authors owe a special thanks to Dr. James Boone and Dr. Don Rice. Both spent many hours assisting in the research for and reviewing this book. In addition, Dr. Rice’s book, *The Wholesale Distributor: Purpose and Function*, provided much of the history of the industry.

To those who built the first fifty years, we feel safe in assuring you that our alumni, current faculty and staff, and students will continue to find ways to make you proud of the ID Program. Thank you for all you have done.

_Gig ‘em Ags_
ACKNOWLEDGMENTS

This book is a collective effort of several individuals and groups who spent time and effort to see this come together from its inception to delivery. The Industrial Distribution Program would like to take this time to thank the following:

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The History of Industrial Distribution at Texas A&M University

This Book is Dedicated to the Generosity of:

The Thompson Family
Thomas and Joan Read
Paul and Judy Andrews

Without whose support, there would be no Industrial Distribution Program.
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Bringing Students and Industry Together
HISTORY OF INDUSTRIAL DISTRIBUTION

1952
Texas A&M University (then the Agricultural & Mechanical College of Texas) established an Industrial Technology degree program in the Department of Industrial Education, a unit of the College of Engineering.

1956
The Industrial Distribution degree program was founded in that same department.

1966
The university created the College of Education, and teacher education activities were transferred there from the Industrial Education Department.

1967
The department’s remaining activities in the College of Engineering were renamed Engineering Technology.
At that time, the department administered four degree programs: B.S. in Industrial Distribution B.S. in Industrial Technology B.S. in Engineering Technology M.S. in Industrial Technology

1975
B.S. in Engineering Technology received TAC/ABET accreditation.
1981
The Industrial Technology program was strengthened to become a manufacturing specialty under Engineering Technology. Consolidated, Engineering Technology was formed from three technology specialties: electronics, manufacturing and mechanical. The Industrial Distribution program remained separate.

1994
The Telecommunications Engineering Technology program, which had been part of the Electronics Engineering Technology (EET) program since 1976, received TAC/ABET accreditation as a separate program closely related to EET.

2001
A web-based distance learning master’s degree program in Industrial Distribution (MID) was launched in the Fall.

2003
The inaugural class of the web-based distance learning master’s degree program in Industrial Distribution (MID) graduated in May 2003.

2006
The department currently has four TAC/ABET-accredited Engineering Technology programs, plus the Industrial Distribution program.

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Steve Church, Chief Human Resources Development Officer, Avnet, Inc. serves on the Board of Advisors for Texas A&M’s Industrial Distribution Program. He was honored in December 2003 by the Professional Association for Industrial Distributors for his outstanding support and dedication to the Industrial Distribution Program at Texas A&M.
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The Industrial Distribution program is helping ensure future success for the distribution industry through its innovative curriculum and qualified graduates, many of whom are now a part of TTI. Texas A&M graduates and the distribution practices of the ID program have helped make us one of the world’s largest electronic component distributors. Starting with 200 square feet of warehouse space and a workforce of one, we now have over a million square feet and more than 2,000 employees around the world.

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In 1998, the Industrial Distribution Faculty at Texas A&M University was asked to research a growing, and potentially problematic trend in many industries supported through distribution. The trend had the potential for wide-spread impact on many of the firms that founded and have continued to support the Industrial Distribution Program at Texas A&M University. The impact would affect distributors and manufacturers alike. The threat was not a looming recession, the price of commodities, such as oil, or the globalization of manufacturing. The threat was the dot.com craze that defined the late 1990s. With the popularity of the movement grew the popularity of a new term for an old concept, “disintermediation.”

The term disintermediation had been used in the financial world since the 1960s and referred to eliminating the “intermediary.” Now the term was being used to describe the removal of the distributor. For distributors, the need to defend their position in the supply chain is not a new problem. Throughout history, many have tried to eliminate what appears to be just a “middleman.” The very use of the term “middleman” is rooted in a belief that the distributor adds redundancy to the supply chain and that a customer’s cost can be reduced by “going direct” to the manufacturer. Many manufacturers and customers who have tried to conduct business without distributor assistance have learned this is rarely the case. Most manufacturers and customers only need time to discover the value they are losing by “buying direct.”

In the industrial distribution field, the value the distributor brings has proven time and time again to far outweigh the perceived additional cost. Most industrial distributors would define their core competency as building and maintaining “relationships.” While this may oversimplify the distributor’s role as the channel leader, it does cover two key areas: relationships with manufacturers, or supply information; and relationships with customers, or demand information. The dot.com plan was to automate this information process, leaving the distributor to provide only support functions; transportation
In the industrial distribution field, the value the distributor brings has proven time and time again to far outweigh the perceived additional cost.
management, inventory management, financing for small customers, supplying technical information, centralizing a point of purchase, etc. These functions vary in intensity and complexity from industry to industry. While industries with complicated transportation issues, such as building materials supply, scoffed at the idea of disintermediation, other industries were not so secure.

What made this threat different than other attempts to eliminate distributors was the tremendous financial support given to the dot.coms. Investors believed that “bricks and mortar” companies were a thing of the past. People would commit to buying online, and manufacturers would be able to process this information quickly and handle the orders. A new world was on the horizon, and in many cases, investors were willing to bet huge sums on the concept. This was the new way of doing business, and if you weren’t on the bus, you would soon be under it. Grandchildren would ask their grandparents, “Why did you not invest in the Internet?” and “Where were you when the world changed?” New companies were springing up in every industry, and Wall Street was just waiting to dump money in their laps. “Never mind your business plan, what’s your web address?” Some companies even saw their stock price dramatically increase overnight by only changing their name to a catchy dot.com phrase. Successful, long-term investors who pointed out the lunacy of the perceived value of the dot.coms were laughed at and referred to as “old thinking.”

In the distribution community, the fear was not whether the distributor could still add value, but whether they would still be in business when the world realized their value. The turmoil caused several distributors, a distribution association, and some manufacturers to approach the Industrial Distribution program to conduct research destroying the “disintermediation myth.” The research mission was to assess the dot.coms’ ability to take market share from the distributors. Were customers ready to purchase a large amount of product online? Were manufacturers prepared to fill these orders? If so, would the support functions provided by the distributor be enough to retain customers?

Unfortunately the study concluded that the automation of information could reduce the need for other support functions as well, which was a jolt to the distributor. Surprising to many though was the discovery of a weakness in the very fabric of the core competency of the Internet. The infrastructure was not in place to receive and process the information necessary to eliminate the distributor’s functions. Much of the information was still tacit (not captured by information systems, i.e. human based) knowledge, known only to distributors. The distributor may not intentionally refuse to share this information, but even if they could be convinced, it was not in a shared form.

The study concluded that the Internet, at least in the industrial field, was not ready to replace the distributor. The Texas A&M University Industrial Distribution Faculty began to share the results with interested parties. “Disintermediation is a myth” was the message, sometimes receiving disgruntled comments from the dot.coms in attendance but mostly receiving standing ovations from distributors.

Ultimately, almost all of the dot.coms failed and the financial life-support from Wall Street came to a halt. The efficiencies that could be achieved through a connected world, the Internet, were not false, however. The industrial channel processes and the necessary technology to support them were simply not ready. The proof came when the surviving dot.coms started building warehouses (became distributors) and manufacturers began asking their existing distributor partners to process orders they received over the Internet. Many distributors credit the findings of the study with saving millions of dollars on untimely and hasty technology investments.

Today, the Internet has become an important tool for many distributors, growing in importance every year.
Manufacturers, distributors, and customers share more information than ever. One thing is clear—as the world becomes more ready to completely capitalize on the efficiencies possible with the Internet, nobody is better positioned than the industrial distribution community.

Since the beginning, the distributor has provided the flexibility required in the supply chain, responding to changing customer requirements and preferences, changing types of products and industries, and changing forms of transacting business. The distributor’s flexibility in responding to change has allowed industries to capitalize on the efficiencies possible, which is the reason the distributor has been, and continues to be, a channel leader in the supply chain.

The Industrial Distribution Program at Texas A&M University, since its beginning, has responded to the distributors’ and their suppliers’ changing needs. Being a hybrid program, a cross between technology and commerce, it exists and thrives through the support of industry partners. Serving these industry partners through providing students equipped with cutting edge knowledge for entry into industry, through providing this same knowledge directly to industry in the form of publications, professional development, and through researching critical issues important to industry has been the trademark of the Industrial Distribution Program. From an experiment in the Industrial Education department in 1956, Industrial Distribution has grown to 500 undergraduate and 30 graduate students. The success of the program is best explained through its willingness and ability to adapt as the industry it serves has evolved.
The obituary of the distributor has been written several times throughout history. The notion of eliminating what many mistakenly believe to only be an unnecessary “middleman” has always plagued the distribution business. For many people, “buying direct” from the manufacturer is considered a right-of-passage. The argument assumes that eliminating the “middleman” will translate into lower prices. However, it fails to consider the value the distributor creates. That value is created through the services the distributor provides. These services often go unnoticed until they are no longer available. Distributor services vary from industry to industry and have evolved over the years, but many of the basic services can be traced back through the history of industrial distribution to its beginning.

The history of industrial distribution is not a well-researched topic. Glenn Porter and Harold Livesay point out in their book Merchants and Manufacturers, that “changes in distribution played at least as important a role in the story of our economic past as did changes in production, though the attention of historians has primarily been directed at developments in the latter area.” In fact, many award winning publications might lead one to the conclusion that distributors were phased out somewhere in the late 1800s. Some argue this is because the value distributors create is not easily recognized. Others argue that distributors have purposely kept this value a secret. As one industry spokesperson commented, “Distributors don’t get fanfare, they just make money.”

According to Porter and Livesay, in the first two centuries of English settlement in this country, commerce was dominated by large urban merchants. Most products were considered commodities and were distributed through these general-line merchants. They often owned ships and other forms of transportation to engage in trade, both foreign and domestic. They acted as wholesaler, retailer, importer, exporter, financed and insured goods in transit, and loaned capital to suppliers. “They were the wealthiest, best-informed, and most powerful segment of early American society.”
As the Industrial Revolution grew in Great Britain in the early to mid-19th century, the volume of trade in and with America grew as well, allowing some merchants to profitably specialize in either wholesaling or retailing, in either importing or exporting, and along specific product lines. For example, the John W. Berry Supply Company was established in 1824 and specialized in the supplies needed for factories and railroad shops. Economies of scale were now possible. Although they were no longer focal to all trade, these merchants were still more powerful than the manufacturers.

The industrialization of many European countries caused a great shift in their populations from rural areas to major cities. While the cities in the United States experienced similar growth, so did the entire nation. America was growing at an amazing pace. There was a vast continent with sizable natural resources to conquer. “Go west” was the phrase, and many seized the opportunity.

As the population of the western and interior portions of the United States grew, the need for goods and services in these areas grew as well. As Dr. Don Rice indicates in his book *The Wholesale Distributor: Purpose and Functions*, the peddler was the primary source of the movement of goods in the early days. Peddlers were private entrepreneurs who risked their money to stock their wagons and transport their inventory, battling the weather and thieves.

As towns grew in these new regions, general stores became popular. These general stores carried local inventory, reducing the need for peddlers. However, this new outlet created certain challenges with the movement of goods. To assist these retailers, large urban merchants on the east coast began to invest in improved transportation systems such as canals, turnpikes, and railroads. Public and private money in many forms were used to grow these new systems. By 1860 over half of the railroad tracks in the world were in the United States.

While the peddler’s functions were reduced by the general store, they were not eliminated. Many were individuals of great flexibility and ingenuity and began to join manufacturers and wholesalers and provided a sales function. They were often referred to under a new name, the “drummer.” Many began to specialize in certain product lines and served as a great conduit for information between the urban and rural merchants. Besides being noted for “drumming up business,” the drummer was also so called because specialized knowledge allowed them to “beat the same drum” wherever they went.

The demand for products in European countries certainly helped fuel the growth of the United States as opportunities to cultivate new lands attracted people from around the world. This growth also created a large domestic market as well. In California, for example, most fortunes where made, not from those in mining but from those who “mined the miners.” The supply business was in great demand. Domestic demand for supplies increased as America fell into the Civil War, then found peace, and began to grow the economy.
The Industrial Revolution had its greatest impact on countries with a free enterprise system and a legal system that provided protection of intellectual property. This allowed entrepreneurs to invest with less risk of government seizure and invent new or improved technologies with patent protection, providing greater rewards. With this system and a vast supply of natural resources, the United States proved to be a fertile ground for growth and became an intellectual drain on many countries. The most ambitious and intelligent wanted to move to America.

As manufacturers began to invent new machines and new processes in the latter part of the 19th century, their profits grew, reducing their reliance on financing from the large urban merchants. As mass production began to take hold, these large merchants proved either unwilling or incapable of moving the high volume of products. Inventories swelled, lowering prices. Another problem with the large merchants was their inability to handle the new technologically complex products. Improvements in design caused rapid changes in the railroad, steel, textile, and other industries. About this time a new industry, the electrical industry, was coming into its own with the invention of new, complex, and dangerous products. To address supply concerns, manufacturers formed large trusts. To address issues with product complexity, manufacturers formed new distribution networks.

While the population of the United States would not have been considered concentrated in urban centers toward the end of the 19th century, the users of producer or industrial goods were concentrated. Porter and Livesay argue that this concentration was one reason manufacturers chose to design new distribution channels. The other reason was the new functions needed with the introduction of technologically complex products. The economist George J. Stigler points out that vertical integration is common in young industries, because they are forced to assume a range of functions to establish their place in the market. As the industries grow, firms are better able to profitably specialize in these functions.

Manufacturers in these industries required close contact with the users of their products and set up marketing organizations to provide services such as technical consultation on the specifications of products, training on the proper use of the products, and service after the sale.
Distributors that were formed resulted from merchants who chose to specialize in producer goods, agents who chose to carry inventory by setting up distributorships, or manufacturers choosing to outsource.
such as providing replacement parts and repair. The marketing organizations that made up this channel included old-line merchants who chose to specialize; agents who represented multiple brands, but rarely competing brands; and internal sales people within the manufacturer who were often engineers.

The use of internal sales people was most common in companies that designed machines that manufactured other machines and in the electrical industry in many different applications. According to Alfred Chandler in his book *Visible Hand*, few distributors could handle the rapidly changing technology of electrical products. Much coordination between the manufacturer and customer was needed, and in part because of the dangers, salaried employees of these manufacturers were used to install, service, and repair these products. However, with many interchangeable parts, general supply firms were still necessary.

In fairness to the historians, at the turn of the century, the increased concentration of customers of industrial components; the increase in complexity, requiring greater coordination; and the growth of manufacturers through cartels or mergers could have signaled the end of the distributor. However these industries grew, and opportunities for specializing in new services emerged. Many of the distributors that were formed between the end of the Civil War and the turn of the new century resulted from these merchants who chose to specialize in producer goods, agents or drummers who chose to carry inventory by setting up distributorships, or manufacturers choosing to outsource these functions. Although industrial distributors, or mill suppliers, had been around most of the century, their role in the distribution of industrial supplies began to expand.

According to Dr. Rice, the industrial distributor at the turn of the century had gas lights, crank telephones if the company was in a metropolitan area, a cuspidor, and a roll-top desk. Inventory consisted of fasteners (such as nuts, bolts, and rivets), power transmission equipment (such as leather belts and wooden sheaves), rope, hand tools, and abrasives. Their largest customers were industrial plants or mills as they were known. Products sold to these large cotton mills, steel mills, textile mills, etc., were referred to as “mill supplies.”
Mass production enabled manufacturers to produce large amounts of goods more efficiently and in greater amounts than ever before.
In the latter part of the 19th century mass production was becoming more common. This enabled manufacturers to produce large amounts of goods more efficiently and in greater amounts than ever before. This drove down the cost to produce most items, but had one negative consequence—more supply than demand. To combat this issue, manufacturers formed large trusts to control supply. The formation of trusts allowed manufacturers to grow significantly more powerful than the independent dealers that would become today’s industrial distributors. The supply firms were no longer the dominant force in American business.

To cope with this new powerful member of the supply chain, trade associations were beginning to form in the 1890s. It was important that trade associations be formed for the mutual protection of their members. The lack of agreement killed the first attempt at building an association in 1891. It was revived again in 1894 but was still ahead of its time. All of these early efforts, however, were to bear fruit with the establishment of the Southern Supply and Machinery Dealers Association in April of 1902. They agreed to meet in Charleston, South Carolina, and discuss mutual interests and goals.

The morning of April 2, 1902, the meeting was called to order by Mr. C. B. Carter, and, in accordance with the program, an address was delivered by Mr. C. B. Jenkins of the Cameron-Barkley Company of Charleston entitled, “Why We Organize.” In his address, Mr. Jenkins defined organization as “the act or process of arranging and getting in proper working order.” He stated that the reasons for the meeting were “to organize an association for the promotion of distribution, friendlier communications with competitors, and for socialness.” More importantly, Mr. Jenkins went on that the associations “must be formed to diminish the ruinous competition of the trusts.” In view of these gigantic trusts, Jenkins said, “It was time for the distributors to get together and discuss their own positions and the treatment they should receive.”
Manufacturers and distributors alike who had banded together for mutual protection now banded together and pledged their support to the United States government with no reservations.
Mr. Carter presented letters received from different firms all over the country, responding to invitations for them to join the association. Companies such as Young and Heintz and Briggs Machinery & Supply Co. from Dallas, Texas; Mayer and Company, Norfolk, Virginia; and Southern Supply Company, Mobile, Alabama, responded to the call. Some responded regretting that they could not attend and others congratulating the movement.

The by-laws were adopted, article by article, and by the end of the 16th day of April, 1902, the constitution was ratified and a new slate of executive officers had been secured. The association still exists in great strength and continues to have significant industrial impact.

Some things never change, because the topics discussed at the early meetings are some of the same topics discussed today. Topics include equitable margins; the manufacturer’s resistance to the increase of profit margins, price cutting, the inability to pass on a manufacturer’s increased costs, narrowing profit margins, the ever increasing sales expense, and higher costs for the distributor. It also seems as though these problems are as prevalent today as they were in 1904. Some of the abuses which existed in the industry then, as well as today, were taking cash discounts after the period had elapsed, taking special returned goods privileges beyond reasonable measure, and price cutting.

In 1908 the electrical jobbers association met for the adoption of their first constitution. In December the Electrical Supply Jobbers Association (which would later become the National Electrical Wholesalers Association, NEWA, and presently the National Association of Electrical Distributors, NAED) met with 79 charter members in attendance in Niagara Falls, Canada. Their objective was to promote friendly relations among electrical distributors and standardize and market high grade electrical merchandise.

Soon after the industrial distributor associations were formed they banded together to support the development of a trade publication for their industry called Mill Supplies. One of the objectives of the new magazine was to promote harmony within the industry. This was the theme of the 1911 convention held in Louisville, Kentucky.

Early 1915 found the country in the midst of a depression. However, the United Kingdom’s orders for war materials to protect themselves from Germany gave greater stimulus to the American economy through the sales of explosives and iron and steel. Many neutral countries turned to America for manufactured goods since exports from Germany and several European ports had been curtailed. The industry had such a boom that in 1916 it was impossible to buy machine tools for immediate delivery.

The inevitable occurred, and the United States entered into a full-scale war with Germany in 1918. Manufacturers and distributors alike who had banded together for mutual protection now banded together and pledged their support to the United States government with no reservations. Their pledge was to be of complete service to their country.

Sales volumes through mill supply houses grew rapidly. One reason for this rapid increase was the government’s purchase of 22,000 war planes. Orders for planes would translate into demand of approximately $150 of hand tools per plane.

Price escalations and inflation are always a problem in times of war, and World War I was no exception. However, immediately following the end of the war in 1919, prices dropped and production declined as the nation entered a recession. The 1920s business outlook was described at that time as “a very sick patient who is convalescing and who must be careful to avoid a setback.”

Industrial and electrical jobbers experienced a period of unrest and tension, and post-war problems increased. By 1921 approximately 20 percent of the industrial, manufacturing, and transportation workers were unemployed. Most distributors had to adjust to smaller sales volumes and lower prices. They also experienced some inflation during these times. Orders were hard to come by and collecting debts even harder.

By 1922, post-war inventories had been reduced, and business returned to a fairly normal state. Customers of iron, steel, and coal distributors were back in business.
As a whole, the first 25 years of the twentieth century was a period of fairly substantial growth. Much of this meant improved sales for distributors, particularly in the area of highway development. Both road construction and the automobile industry provided sources of revenue. Also, the trucking industry enhanced distributor sales by making transportation much quicker from factory to end-user.

The war had demanded increased capacity and improved machinery, which created additional markets for consumable supplies for the distributor. These new markets gave rise to additional new industries such as electric washing machines, electric refrigerators, and radio sets. The American home and its occupants were developing costlier tastes and desires. Radio apparatus annual sales climbed into the millions by 1925. The entire range of products was boosted by hundreds which sold through distributors. The two largest electronic distributors of today were originally suppliers of radio components. Avnet, founded in 1921, and Arrow, founded in 1935, started only blocks apart in an area of New York City known as Radio Row.

Technical products were becoming more common, not just in producer goods but in consumer goods as well. Growth potential was enormous. Mass production was becoming a way of American life by the 1920s, but it was useless without “mass distribution.” However, mass distribution of highly technical products demanded special services, which were rendered best by the distributor. This forced the distributor salesperson to increase his technical expertise and also to become accustomed to selling to engineers and persons other than purchasing managers. The average distributor of this era had an inventory of approximately $100,000 worth of industrial and electrical supplies for mining, oil field, shipping, automobile, railway, and metal removal industries as well as for blacksmiths, textile mills, and public utilities.

Even though many of the distributors who had been in business for several years were skeptical of those who wished to specialize in certain product lines or industries, many specialty distributors sprang up. One such specialty was machine tools. Machine tool manufacturers felt that the average general line distributor could not provide the technical expertise to sell machine tools. Some machine tool manufacturers still hold that concept today, even though broad general line distributors do have specialty teams within their organizations who sell and service machine tools.

Having endured World War I and the serious portion of the depression which followed, the country once again moved into times of prosperity. President Calvin Coolidge promised a $300 million tax cut for 1926, while 4 million cars were being manufactured annually. It seemed like the prosperity would never end. However, President Herbert Hoover warned that the speculation in stocks and bonds was too great, signaling a potential end.

During this time, the distributor had been particularly affected by the manufacturers selling directly to the consumers and by serious price-
cutting. Alvin Smith of Smith-Courtney Co., Richmond, Virginia, one of the early leaders of the
Southern Industrial Distributors Association (SIDA), called it “a year of the most unbridled, ignorant, and
unscientific price cutting we have ever been through.”

Some pessimistic individuals thought that
the change to selling direct would kill the small
distributor. It did not. But even during the greatest
prosperity in the 1920s, the inflationary factor kept
distributors from making a healthy profit because of
the higher operating costs. The distributors felt that
their manufacturers were not true partners in their
selling efforts because the manufacturers would sell
direct to the customer when they had an opportunity.
Most manufacturers had no proven distributor
policies and were not willing to generate them.

This was also an era of specialization, high
production, and customers who wanted high service
levels. The manufacturers felt that the distributors
could not perform this service as well as they could.

The stock market crashed in 1929, and business
was once again in a depression. The problem was
compounded because the distributor was getting
only 35 percent of all supply purchases from
large customers. Strong sales and promotional
programs were the only things which helped build
faith in the service provided by distributors.

Electrical wholesalers saw their sales volumes drop
by 60 percent between 1929 and 1933. In order to
help this faltering situation, the National Electrical
Wholesalers Association changed its direction. The first
major effort was the development of the “Code of Fair
Competition” for the electrical wholesaling industry,
which established federal fair trade guidelines.

One positive experience during the depression was the
strengthening of the relationship between distributors
and manufacturers. It forced manufacturers to close
their branch outlets, decrease their sales forces, and
begin to rely on the distributors for available sales.

President Roosevelt’s National Recovery Act (NRA),
passed in 1933, had a dual purpose: to help rid businesses
of destructive trade practices through fair competition
policies, and to increase consumer purchasing power
by establishing minimum wages and maximum hours.
The act outlawed sales prices below cost or below
suggested resale prices, discrimination between buyers,
and disguised price concessions. The distributor’s
codes, called Blue Eagles, lasted until May 1935, when
the NRA was invalidated by the Supreme Court.

The Supreme Court also knocked out the Code of
Fair Competition of the electrical industry. NEWA
members quickly substituted a Code of Practices, which
had already been worked out with the Federal Trade
Commission. The demise of the NRA also gave NEWA an
opportunity to establish new membership requirements
that would ultimately attract those wholesalers who
were fully and ethically committed to the industry.

Because of the NRA, distributors were bonded
together as never before and local distributor
organizations were boosted into dominance. One
such organization was the Central States Industrial
Distributors Association (now a part of ISA) founded
in 1933, with Wendall H. Clark of Samuel Harris &
Company from Chicago, Illinois, as its first president.

Another of Roosevelt’s New Deal legislative measures
was the Wagner Act, passed in 1936, to institutionalize
collective bargaining. Also in 1936, the Social Security
Act came into being, and in 1937, resale price agreements

Hearing on House Bill 1746—Letters

Chairman Judiciary Committee,

House of Representatives, Washington, D. C.

Dear Sir: On behalf of the Southern Supply and Machinery Dealers’ Association I beg to protest against the passage of House Bill 1746, known as the “Hepburn amendment to the Sherman anti-trust law,” in so far as it refers to
legislating in interstate commerce the sympathetic and other forms of malicious
strikes by legalizing a strike for any cause. Also in so far as it legalizes the
boycott by permitting any form of peaceful combination of employers for ob-
taining from employers satisfactory terms for labor.

Also, in so far as it legalizes the blacklist by permitting employers to dis-
charge employees for any cause and to combine and contract with each other for peacefully obtaining labor.

Also, it appears to us that this bill will legalize the worse forms of combin-
tion between employers and employees to fix the price of labor or of material,
or to exclude laborers from employment, or employers from competition; the
most harmful and oppressive agreements with which the industrial world has
any experience.

And, finally, the proposed bill largely repeals the provision of section 10 of the
Hepburn Act of 1887, which defines certain serious offenses in restraint of
trade and commerce between the States.

We trust that you will consider this letter as a part of the record in your com-
mittee’s consideration of this bill, and oblige.

Very truly,

Alvin M. Smith,
Secretary-Treasurer.
A National Defense Committee was formed in 1941 by distributor and manufacturer associations in order to coordinate defense efforts and control regulations.
were enforced by the Miller-Tydings Act. In 1938, the Wage and Hour Law was passed, which has affected American industries ever since. Hiring practices and pay scales were emerging governmental interests.

The years 1936 and 1937 saw electrical wholesalers establishing record-breaking sales volumes, but the end of 1937 saw a sharp drop in business. This rapid decline in sales created inventory and collection problems, which this industry had not yet experienced. Inventories were overflowing, and credit, fully given in the preceding decade, was being tightened.

By 1939, industry cost studies indicated the distributors total share of the market had dropped substantially from the upsurge the industry had felt in the early twenties. The past decade had brought down some of the old industrial distributor “houses,” but strong ones remained the nucleus of the distribution industry.

The decade also had established new governmental agencies with which distributors had to learn to work. The New Deal had forced these industries into compliance, building into their already firm structures accommodations for new forms of taxation and regulation, wage and hour laws, social security, etc. In spite of the government intervention, it was an era which saw new and exciting products boost the living standards of the United States to the highest of any in the world.

Hitler invaded Poland in 1939. By January 1940, sales figures began to rise despite the darkened days of the foreign war. Optimism was in the air as distributors increased their inventories in hopes that foreign nations involved in their “own” war would buy from American stockpiles.

In those early days of war, as soon as Americans began to realize that the “foreign” war was in fact our own, distributors proved again and again through performance that they could do the job better and less expensively than anyone else. They were beginning to develop an awareness of new demands they might have to meet in the near future. To distributors, new demands meant buying problems, lengthened deliveries, hiring and training new employees, and space shortages. But distributors were a strong knit group by this time and met the demands head on.

In December 1940, the Office of Production Management, a government agency, took over control of production and raw materials, which could be used in the war effort. Distributors and manufacturers were called on to help. However, some agencies of the government were staffed by professed economics experts with two schools of thought about distributors: the “direct selling” and the “anti-middleman” concepts. Not having done business with the United States Military for very long, the wholesale distributors were completely surprised when they were brought under fire and summoned by these services to explain and defend their business postures. In order to retain their policies and procedures, the industry had to demonstrate conclusively to the satisfaction of the armed services that they were actually saving money by using the distributors. The distributors proved their case.

A National Defense Committee was formed in 1941 by distributor and manufacturer associations in order to coordinate defense efforts and control regulations. Customers not in defense industries began to find it tougher to operate as priorities, for war began to take up more of the distributors stock. When the Japanese attacked Pearl Harbor in December 1941, distributors’ sales volume was $1.8 billion. Inventories and daily orders were 30 percent higher than the previous year, personnel up 20 percent, average order size up from $13.85 to $25, inventory turnover up from 5.4 to 7, and direct shipments down from 11.84 percent to 9 percent. War production was at its peak. Costs were up, but so were profits.
By 1943, the distributor was winning the battle for recognition. The industrial wholesaler’s position was also more positive as the war years focused upon the vital part distributors were playing in our country.

As World War II was coming to a close, the 1944 Triple Convention met in Chicago, Illinois. Post-war problems could be seen on the horizon. Personnel, contract termination, surplus stock disposal, reevaluation of sales methods, and post-war competition were the topics of concern. Robert Black of Black & Decker Manufacturing Company suggested adapting a way to facilitate contracts between distributors and manufacturers in the future. The war had disrupted many manufacturer-distributor relationships and mending had to be done.

The war ended in 1945. We celebrated V-E Day (Victory in Europe) and V-J Day (Victory in Japan) that year. The American people were pleased that the war was finally over and were anxious to get back to peace and prosperity.

A new type of wholesale distributor had emerged during the war. Sales and service oriented, management-intensive distributors began to organize their sales efforts, survey their markets, measure performance, and concentrate on sales programs and training efforts to gain greater market share.

The industry also had seen new concepts emerge and coined the phrase “mass distribution” to go with the “mass production” concept. With mass distribution and production being demanded by the American public, better selling techniques had to be developed.

“Better Selling” was the theme of the 1946 distributors’ convention in Atlantic City, New Jersey. Arch Morris, Publisher of *Mill Supplies*, wrote about the meeting, “This industry is united as never before for cooperative action in meeting common problems. Having attained this... it is not going to be very difficult to button the loose ends in distributor-manufacturer relationships...”.

By 1947, handling costs for distributors were on the rise as the post-war slump receded. The cost to handle an order was up from $5 to $15. However, sales were improving, inventories were larger, and distributors were hiring more salesmen to “get the orders.”
The years following the war were in many ways spectacular. Men and women returned from military service and entered educational institutions or started work-study programs on the GI Bill of Rights. Years later, this proved to be one of the better expenditures of federal funds, because it was not a dole but truly an investment in America’s greatest resource — its people. Those who came back were also ready to “get back to living.” They took husbands and wives and started families right away. This surge of children, known as the “post-war baby boom,” affected all facets of the American way of life from the number of public school teachers needed to the supplies required to manufacture automobiles and build new homes.

During the war, domestic goods were almost nonexistent. Everyone had been called upon to sacrifice in order to support the war effort. Staple foods like meat and sugar were rationed, and almost no domestic automobiles were manufactured between 1941 and 1945. During the same period, employment approached the 100 percent level with almost every available person working. Wages were increasing. The irony was that masses of people had money for the first time since the “crash of ’29” but could not spend it because virtually all consumer goods were going to the war effort.

Three other factors that influenced the industrial economy following the war were the desire for mobility by young people, the amount of oil available to make gasoline, and idle manufacturing capacity. Young men and women had come out of the mountains of Tennessee and from the plains of Kansas and had been shipped to Europe, North Africa, or the South Pacific. When they came back to the States they were not satisfied to go home and stay there. They wanted to go to New York and to California, but they needed and wanted their own automobiles. Factories, which had been changed earlier to make trucks and tanks for war, were reconverted to make cars and pickups once again.

During the war, America searched for and found oil to field a mobile army. Oil production neared three million barrels a day by 1947, but domestic consumption was only half of the potential production. The desire to go and see, coupled with the availability of gasoline, the productive capabilities of manufacturers to make automobiles, and people with buying power, turned America into an automobile-based economy.
Television was introduced in 1947. In addition, consumers were demanding more major household appliances than ever before. The heavy post-war electrification of rural areas brought the cities into the country and much of rural America into the cities.

The 1948 distributor convention achieved a milestone in manufacturer-distributor relationships with the inauguration of the “contact booth” program originally suggested in 1944 by Robert Black of Black & Decker Manufacturing Company. Some 200 manufacturers contracted for booths staffed with executives. The purpose of the booths was to place corporate executives, the decision makers, strategically in a central location so that it was easy to make direct contact to get immediate answers to pressing problems.

A slackening of industrial activity was seen in 1949 across the country, but industry began to bounce back by 1950 with the threat of a new war, later to be called the Korean Conflict. With the threat of another war and the government beginning to rebuild military priorities, stockpiling, allocating, and critical shortages again became familiar words to distributors. However, this war would coin a new phrase, “guns and butter.” American would provide the needed support for the war but would also fill their increased appetite for consumer goods.

As distributors proved their permanence and significance in the supply chain and economy, the need for qualified employees increased. The industrial distribution industry was searching for employees that possessed the rare combination of business sense, technical acumen, and ability to relate to people; individuals that could solve customer problems and “get the order.” They looked to Texas A&M.
Texas A&M University was the first public university to offer a course of study in industrial distribution. When the industry needed a well rounded individual with a technical acumen to represent its business, A&M was the perfect choice. The tremendous success of the program at A&M is contributed, at least in part, to the seamless relationship between the demands of the industrial distribution industry and the ability of A&M to serve those needs. A look at the history of Texas A&M University will reveal why A&M is the perfect institution to train current and future employees in the field of industrial distribution. A&M has been able to change when needed, preserving the best of its past and proving the necessity of its role in society by proudly serving the people of its state, nation, and the world.

Texas A&M University is the oldest public institution of higher education in the state of Texas. In 1866, the Texas state legislature accepted the donation of federal lands to be used to establish at least one college, as the Morrill Land-Grant College Act of 1862 states, “where the leading objective shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts.” Since no federal lands existed in Texas, federal lands in Colorado were received and subsequently sold, with the funds being joined with funds from the state of Texas to establish the Agricultural and Mechanical College of Texas on April 17, 1871. A committee selected a site near Bryan, Texas along the Houston and Texas Central Railroad, and on October 4, 1876, the A&M College formally opened its doors with 106 students and six faculty members.

Senator Justin S. Morrill of Vermont is generally given credit for the idea of a land-grant institution being used to teach the practical arts, but Johnathan B. Turner, a one-time professor of rhetoric at Illinois College unveiled a plan for the sale of federal lands to be used to support a state university in 1850. The plan called for the teaching of the “practical arts” in conjunction with the classics to the “industrial classes.” While Morrill
With the expanding range of technologies in the late 1800s, Texas A&M had become a producer of agricultural administrators, engineers, businessmen, educators, and soldiers rather than farmers and mechanics.
and Turner may have developed the idea independently, Morrill was able, after several attempts, to push the Act through Congress and have it signed into law by the president, Abraham Lincoln, in 1862. With the onset of the Civil War, the addition of teaching military tactics helped the Act become law.

One interesting fact about the land-grant-college movement is that the Republic of Texas in 1839 donated fifty leagues of land (221,400 acres) for the funding of two colleges or universities. The endowment is what has grown to become the Permanent University Fund, which is used to support Texas A&M University and the University of Texas in Austin. While the endowment did not specify the teaching of agricultural and mechanical arts, it did specify its availability to the “masses” to establish correct “moral and political character.” The Republic of Texas in many ways anticipated the need for funding higher education. This endowment has helped these two universities to achieve tremendous success.

In the early days, many debated the need to teach agricultural and mechanical arts. Some believed the College should train in the classics, while others believed it should train for skilled labor. Opponents of training for skilled labor did not believe a need existed for “textbook cabinet makers.” Agricultural societies were demanding teaching and research in agriculture, but farmers did not believe farming could be taught. Many farm boys attended to get away from farming. One early observer noted that Texans did not send their sons to A&M to be “plain dirt farmers” and “grease monkeys and mechanics.” Another problem was the increased expense needed to fund experimental farming and machine shops compared to the classical literacy and classroom instruction.

The first administration simply taught the classics and were replaced in 1880 by an administration that interpreted the Morrill Act as providing only for the instruction in either mechanics or agriculture. If a broader education was desired, students would need to go somewhere else. The restriction was not successful. Faculty noted that students did not come for only technical training, and many started believing that A&M was not a needed institution and was a failed experiment that should be closed. However, the Agricultural and Mechanical College of Texas would find its role.

The 1885–1890 College catalogues stated the role and purpose of A&M with the following:

. . . this college is not a trade school designed to take the place of the old apprenticeship system, but an institution where young men may receive broad and liberal training in all those sciences and arts which contribute to useful citizenship in the pursuit of all productive industries.

With the industrial revolution in full force in the United States and the expanding range of technologies in the late 1800s, Texas A&M had become a producer of agricultural administrators,
engineers, businessmen, educators, and soldiers rather than farmers and mechanics. This role fit perfectly with what the new world would need. Anderson James Peeler, an A&M board member and speaker at an early commencement, noted that the Land-Grant College Act was one of the “noblest things in American annals” and that “the greatest warfare of the present and future centuries is industrial warfare.” A&M was now satisfying the objective of the Morrill Act. At A&M, a broad education would accompany an education in the practical arts. A&M students would “learn by doing,” getting practice in the laboratories and experimental fields.

In the early years, the engineering programs at A&M were extremely popular. Many more students registered for the course of study in engineering than in agriculture. While the agricultural departments would certainly prove their worth, regarding early students as “Farmers” or “Aggies” would have been inaccurate. “Engineers” would have been more suitable. This early success in attracting students would pave the way for a very successful College of Engineering. It also proved the importance of the field of study in the new world economy. In 1913, A&M engineers voluntarily created the Texas Engineering Experiment Station (TEES) to research important issues in the field of engineering and to disseminate engineering information through printed bulletins.

One question was still left unanswered about the A&M College. Was the teaching of military tactics necessary? Most believed the concept of teaching military tactics was only added to the Land-Grant College Act to help the bill succeed in a time of war and was no longer necessary. That question would be answered with the arrival of Lawrence Sullivan Ross to the campus. Ross was elected to the presidency of the A&M College on July 1, 1890. Ross assumed the role at the end of his term as Governor of the State of Texas and served as president of the College from 1891 through 1898.

Ross was a colorful character and a military hero. Governor Sam Houston assigned him command of frontier forces in 1859. Ross would earn a reputation as one of the most famous soldiers in the Southwest. He rose to the rank of brigadier general in the Confederate army and won the title of “Hero of Corinth” for his bravery during a battle at Corinth, Mississippi. Ross’s tenure at A&M would give the military training and Corps of Cadets permanence and respectability. He believed the component was a vital part of the College. By 1912, the Board of Directors of A&M noted that the military component was overwhelmingly approved. It “benefits thy physical man, encourages obedience and discipline, promotes
On March 21, 1917, A&M became the first college in the United States to offer its facilities and equipment to the federal government for military purposes, including war training.
Ross’s acceptance of the presidency of the A&M College signaled that the leader of the institution was a prestigious position. He took the College to a level of importance few others could. He was a hero and a statesman. Many parents of the time believed they were sending their sons to “Sul” Ross, not just to the College.

The College had become an important part of the Texas landscape; however it had little reputation outside local borders. Texas A&M’s answer to the call of duty during WWI changed that, allowing it to emerge with a proud, international reputation for military, engineering, and agricultural capabilities.

On March 21, 1917, A&M became the first college in the United States to offer its facilities and equipment to the federal government for military purposes, including war training. One of the reasons for this offer, as indicated by the Board of Directors, was that the need for technically trained men for military service was required for modern warfare. A&M President William Bennett Bizzell went to Washington D. C. to secure additional supplies, equipment, and Army officers. By the time that the US declared war on April 6, 1917, President Bizzell had already returned to College Station to direct mobilization.

By the end of the war, A&M had trained an additional 3,648 soldiers in various technical specialties. Over half of the all-time graduates of A&M served during the war, including two brigadier generals, seven colonels, twelve lieutenant colonels, 52 majors, 173 captains, 456 first lieutenants, and 530 second lieutenants. Fifty-five A&M soldiers died in service.

A&M emerged from the war with a proud record of service. As history professor Henry C. Dethloff wrote,

World War I marked a distinct watershed in the history of the A&M College. New problems and contingencies would arise in the new order in which the College emerged, but overall Texas A&M would maintain a basic continuity with the past, for the new American society which emerged after World War I was a society of producers — of engineers, technicians, scientists, and agriculturists. It was the world for which Texas A&M had been originally designed.

After WWI, enrollment increased, even during the depression. The Permanent University Fund allowed A&M to continue to receive funding during these difficult times, but the College found other ways to allow students to attend at lower costs. For example, A&M established student cooperative housing, a model that would be replicated around the country during these years. Toward the end of this period, war was once again on the horizon, and A&M was again “on a war footing.” A&M had served its country well and could be proud of its contributions during World War I. It was a mark that would be surpassed during World War II.

In 1939, A&M again offered the services of the college to the military “in any needed capacity.” Close to 20,000 former students served in the military during WWII, including around 14,000 as officers. Twenty-nine Aggies achieved the rank of general. More WWII officers were from A&M than from West Point. Aggies were at Pearl Harbor, Bataan, Corregidor, Midway, Guadalcanal, Normandy, North Africa, Italy, and the Battle of the Bulge.

A&M also trained over 45,000 Army, Navy, Marine, and Air Corps personnel in engineering, science, management war training courses, radar and radio operation and maintenance, and preflight instruction. When industry converted to war-time production, A&M also converted to war-time production.
Seven Aggies received the Congressional Medal of Honor for their efforts during the war, including Second Lieutenant Lloyd D. Hughes ('43), Thomas W. Fowler ('43), Sergeant George Dennis Keathley ('35), Lieutenant Turney W. Leonard ('42), Lieutenant Eli Whiteley ('41), Sergeant William Harrell ('42), and Major Horace S. Carswell ('38), who attended A&M but completed his studies at Texas Christian University.

Accompanying General James Doolittle on his April 1942 raid on Tokyo were several former students, including Lieutenant William N. Fitzhugh ('36), Captain Robert Manning Gray ('41), Major James M. Parker ('41), and Major John A. Hilger ('32) who was second in command under Doolittle. The men were awarded the Distinguished Flying Cross.

James Earl Rudder ('32) led a group of U. S. Army Rangers on a daring mission to take out German guns on Point du Hoc leading up to the Normandy invasion. Rudder and his men may have been the first Allied soldiers to land on Normandy. The mission was to take out heavy German gun batteries positioned on the top of Point du Hoc. The Rangers stormed the beach and scaled 100-foot cliffs while under heavy fire. When they reached the expected position of the batteries, the guns had been relocated. Due to the intense training the men received under Rudder, they were able to regroup, quickly move inland, and find and destroy the guns. They then held their position at the top of the cliff for 48 hours while under attack. Casualties were greater than 50 percent. Rudder was wounded twice during the mission. However, the removal of the guns saved countless lives when the balance of Allied Soldiers landed on D-Day. Rudder then assumed command of the 109th Infantry Regiment that fought in the Battle of the Bulge. Rudder became one of the most decorated soldiers of World War II. He rose to the rank of Major General of the United States Army Reserves in 1957.

For more information about the service of former Texas A&M students during war, read Texas Aggies Go to War: In Service of Their Country. The book is written by Henry Dethloff with John Adams. It is forwarded by President George H. W. Bush who writes that “this book tells a remarkable story, one that makes me value and admire my adopted university all the more.”

By the end of the war over 950 former students had given their lives in service. Aggies played a role in the ending of the war as well. Colonel Tom Dooley, who was one of the Aggies taken prisoner on Corregidor, witnessed the Japanese surrender aboard the U.S.S. Missouri. Also, the first official entry into Tokyo after the Japanese surrender in 1945 was led by a tank in the First Cavalry Division flying a Texas flag and displaying the Aggie slogan “We’ve never been licked.”

The first official entry into Tokyo after the 1945 Japanese surrender was led by a tank in the First Cavalry flying a Texas flag and displaying the Aggie slogan “We’ve never been licked.”

Photo courtesy of Cushing Memorial Library, Texas A&M University
After the war, A&M experienced significant growth, mostly from the combination of entering freshman and returning veterans.
Perhaps the level of dedication and success of Aggie soldiers led General George S. Patton to give the following quote,

Give me an army of West Point graduates and I’ll win a battle. Give me a handful of Texas Aggies and I’ll win the war.

After the war, A&M experienced significant growth, mostly from the combination of entering freshman and returning veterans. Veterans with at least twelve months of service were not required to join the Corps. For the first time in the history of the College, a recognized civilian student body existed.

A&M soon began to experience slower growth than the other institutions of higher learning in America. While other universities were experiencing exponential growth in the late 50s and 60s, A&M’s enrollment was just over 8,000. Many believed that compulsory enrollment in the Corps of Cadets and the all male orientation where limiting the potential of the College. Athletically, the football team won only three conference titles from 1956 to 1975. This was not acceptable for a team that had won a national title in 1939 and surrendered no points in 1917, no points in 1919, and just seven points in 1920. Athletic recruits did not want to “go where there were no girls” and “be woken up at 6 a.m. for roll call.”

If the College wanted to be more than just a regional military school, change was needed, but these policies would not be easy to change. A school with such a rich history of tradition would be reluctant to make any change that might threaten its proud heritage. An institution that wants to preserve the past but is dealing with a changing world needs a leader that can handle these circumstances. Texas A&M found that leader—General James Earl Rudder.

Rudder gave the appearance of being an Aggie of traditional school ties, and many felt Rudder was too conservative to make the difficult decisions and changes many felt were needed. Although Rudder was not a proponent of change when he returned to College Station, he would soon take charge of the school’s transition.

In 1963, the name of the Agricultural and Mechanical College of Texas was officially changed to Texas A&M University. This name was important to reflect the current and expected growth of the institution. It was not just a college but a university complex of several colleges. Under the new name, the “A&M” does not signify Agricultural and Mechanical. It only provides that symbolic sound to preserve the school’s past.

Since the State of Texas had one all male school and one all female school of higher education, the courts had ruled that A&M could maintain its limiting of admission to men. But in 1963, A&M began to admit women on a limited basis. Qualified women were admitted to graduate studies. The wives and daughters of students, faculty, and staff were also admitted if they met the same academic standards as the men. Many former students were disappointed by this change. They felt
the “West Point of the South” would not be able to maintain its reputation as a military school. In 1965, the Board of Directors gave President Rudder the authority to use his discretion in the admitting of other women as well. By 1969, all women who met basic academic standards were admitted. In 1971 the Board of Directors officially recognized Texas A&M University as a “coeducational university that would admit all qualified men and women on an equal basis without regard to race, creed, color or national origin.”

In 1965, membership in the Corps of Cadets became voluntary. By 1970 less than half of the student body was enlisted in the Corps. This is more of a result of the increase in the size of the student body than a reduction in the size of the Corps. The change has had an unexpected benefit to the Corps. They have become a more elite and selective organization. They continue to represent and preserve the best traditions of Texas A&M. They have become the “bearers of the flame.”

Today Texas A&M University is a world class university and research institution. Great military leaders and Noble prize winners have walked its halls. Its contribution to our nation has been great and its future is undeniable. Texas A&M University is extremely proud of its success and growth, but equally proud of its past heritage. In his book The Pride of Aggieland, Homer Jacobs writes:

To set foot on the Texas A&M Campus is to step back in time. From the presence of the Corps of Cadets to the century-old traditions that form so much of the fabric of the school, Aggieland is as nostalgic as it is patriotic.

And yet the school that first resisted change from its all-male, military heritage has transformed itself into a large and dynamic university. All the while, Texas A&M has maintained and nurtured its identity as one of the most spirited campuses in the country.

In an unsettled world, Texas A&M is the perfect counterpoint to negativity and cynicism. To anyone who may wonder where honor and goodness have gone, I say come to College Station.

Texas A&M University has been able to change with the market it serves while preserving the best of its past. The devotion to the people A&M serves is the hallmark of why many express an absolute love for the institution. The industrial distributor continues to survive because of their flexibility to meet market changes and the service they provide to people. Texas A&M University and the companies in the field of industrial distribution have benefited greatly from the close relationship. As long as the industry continues to have a need for a university that teaches and researches the “practical arts” and wants to hire well-rounded students with a technical acumen that have been “trained by doing” and possess a proud sense of service, the relationship will only strengthen.
After attending a conference and learning about the growing need for a well-rounded college-educated person in a growing industrial field, a Texas A&M board member suggested the college investigate the potential of offering a course of study in industrial distribution. The task fell to Chris Groneman, the Department Head of Industrial Education, to explore the idea further. Groneman investigated the concept and agreed that a large demand existed, and in 1956, Industrial Distribution was added as an option within the Industrial Education Department. Today, it might seem strange that an education department would prepare individuals to enter industry. But times were different, and Industrial Education at Texas A&M was no ordinary education department. The faculty and the culture in Industrial Education would prove to be a perfect match with the demands for industry. In numerous ways, the department had been preparing to teach industrial distribution for many years.

Along with the growth in demand for agricultural and mechanical arts education, there came a growth in demand for teachers of these subjects. Teachers were needed at the college level but were also needed in the trades, industries, and public schools. These programs in public schools have had many names over the years, including agriculture, ag, manual arts, industrial arts, shop, and technology education.

Many early supporters of the land grant movement recognized this need for educators, including Professor Jonathan B. Turner of Illinois. Turner supported the preparation of teachers and lecturers in his 1851 pamphlet describing the needs of the industrial classes. He believed the land grant institutions should supply these needs. In his pamphlet, he wrote:

No people ever had, or ever can have, any system of common schools and lower seminaries worth anything, until they first founded their higher institutions and fountains of knowledge from which they could draw supplies of teachers . . .
third floor of the Academic Building, a historic building located in the center of the Texas A&M University campus. The building was built in 1914 on the site of Old Main. Old Main was the first building built on the A&M campus, built in 1875 and lost to fire in 1912.

Texas A&M was not coeducational at this time, but many women attended summer sessions in this department during the 1920s and 1930s.

In 1924, the department was removed from the School of Engineering and placed in the newly created School of Vocational Teaching. In 1935, the School of Vocational Teaching was dismantled and the Department of Industrial Education returned to the School of Engineering. The department also physically moved from the Academic Building to the Mechanical Engineering Shops, which today is Thompson Hall. Thompson Hall was built in 1922 at a cost of $150,017.90, which many believe was one of the best values A&M has received for an investment.

As with any college program, one of the major focuses of the department was to train people to learn. The Industrial Education Department considered its role as not only train people to learn but also train individuals to teach what they had learned. In the early years, the department stated its purpose as “...the preparation of men for the secondary schools and the training of instructor-executives for the industries.” The department would prove successful at fulfilling its purpose.

Over the years, the Industrial Education Program produced many successful graduates, including such notables as: General James Earl Rudder ‘32 who became one of the most decorated soldiers during World War II and who became President of A&M, guiding the college through a dramatic period; Marine General Bruno A.
Hockmuth ('36); and Honorable Dan Kuykendall ('48) who won a congressional seat in Tennessee. By 1968, all but one larger city supervisors in Texas were graduates.

Texas A&M had from the beginning believed one of the responsibilities of the land-grant colleges was extension work, or providing research and practical education to industry and people outside of those pursuing degrees. In 1914, the Smith-Lever Act would clarify this responsibility by establishing extension services that would “…give instruction and practical demonstration to persons not attending or residents in said colleges and imparting to such persons information on said subjects through field demonstrations, publications and otherwise.”

The 65th Catalog of A&M gave the following description:

Industrial Extension Training Service
In the fall of 1940, there was established an Industrial Extension Training Service as a cooperative program between A&M and the State Board of Vocational Education . . . work carried on through the Department of Industrial Education.

The establishment of the Industrial Extension Service was a result of the ideas and hard work of Professor Ed. L. Williams. Beginning in the 1920s, Professor Williams commuted to Houston and Galveston to facilitate classes offering industrial teacher training along with performing his regular duties in Industrial Education in College Station. The classes continued to grow, resulting in the establishment of the formal program in 1940. In 1942, Williams began to devote his total time to the extension work, and by 1945 the Industrial Extension Service employed 15 full-time and 20 part-time instructors who conducted training programs throughout the state. Courses offered included automotive service, traffic control and police training, water plant operations, sewage disposal plant operations, accident prevention, firefighter training, supervisory training, and power line construction.

The word “Training” was eventually dropped from the name, leaving the Industrial Extension Service.

During World War II, the Industrial Extension Service conducted federally funded programs, including operating branch technical schools for industrial trades in Burnet and Cuero, Texas. When federal funding was lifted from these programs, the Industrial Education Department asked if industry would be willing to continue the funding for certain programs. Industry continued the funding, a significant development in the relationship between industry and the department.

The Industrial Extension Service continued to grow and became the Texas Engineering Extension Service (TEEX), an autonomous unit reporting directly to the Dean of Engineering. A look at their website will reveal that today, TEEX is world renowned for its hands-on, customized training, and offers a wide range of technical services.
Industrial Technology, created in 1951, replaced teacher certification courses in industrial education with courses in supervision, safety, calculus, and engineering.
skills training programs aimed at employed workers and those entering the labor force. In 2006, TEEX provided training and technical assistance to more than 221,500 people from all 50 states, five U.S. territories, the District of Columbia, and 57 countries through 6,000 classes conducted across the nation and world. These are impressive statistics for an organization that began with one man operating out of his car within the Department of Industrial Education.

With a close tie to industrial firms, in 1950, the department was able to sense a need for a degree option that would prepare students for supervisory and management positions in business and industry. A new program that led to a Bachelor of Science in Industrial Technology was created in 1951. In this program, teacher certification courses in industrial education were replaced with courses in supervision, safety, calculus, and engineering. This evolved into today’s Engineering Technology program.

In 1949, Texas A&M hosted the first Industrial Teacher Conference. The conference was conducted by the Industrial Education Department. From the beginning, Industrial Distributors in Texas sponsored and attended the conference as a way to network with many of the people who purchased equipment and supplies for the various training shops and labs around the state. While networking with members of programs at public schools, distributors were also networking with the faculty in the Industrial Education Department, another significant event that helped strengthen the relationship between industry and the department. Many of the distributors were members of the Houston Industrial Distributors Association (HIDA) and the Southern Industrial Distributors Association (SIDA).

When, in 1955, the president of A&M asked the department to research the possibility of offering a course of study in Industrial Distribution, the department turned to the industry with which it had a developed relationship. It turned to the members of the Houston and the SIDA.

These members echoed the growing need for college-educated people in the Industrial Distribution field. Products were becoming vast and complex, companies were hiring more engineers, and purchasing within these companies was beginning to be handled by college trained employees. A new breed of salesperson was needed, one that could speak to both engineers and business people. The person needed to be able to communicate between engineers to solve customer problems and also explain the value of the solution in business terms.

These early supporters of the program did not suggest a particular curriculum. They only described the desired product, a well-rounded individual that could both solve customer problems and “get the order.”

The department agreed that a large need existed and placed a simple call to the Registrar’s office to add the option to the next catalog. The College Catalog of 1956–1957 described Industrial Distribution as an option under Industrial Technology — Option Three in the Department of Industrial Education. The
Catalog read as follows:

Students interested in the Group 3 option also have the opportunity to prepare themselves for industrial technical sales (industrial distribution). The demand for graduates with sales potential is increasing annually and employment opportunities are plentiful at this time. Those pursuing this pattern should take such courses as indicated on page 207.

The curriculum was similar to Industrial Technology. Course work included:

- Business Administration 409 – Marketing;
- Business Administration 318 – Wholesale Merchandising;
- Business Administration 435 – Salesmanship;
- Business Administration 446 – Marketing Industrial Products;
- Industrial Education 308 – A Study of Modern Industries;
- Industrial Education 429 – Foremanship and Supervision; and
- Industrial Education 444 – Industrial Distribution.

The Industrial Distribution Program at Texas A&M was launched. Many are surprised that a program designed to train technical sales people to enter the industrial field could be successful in a department designed to train teachers. But the Industrial Education Department was no ordinary education department. Over the years, the department had produced successful graduates, had built close ties with industry, and had taught people how to learn and teach. Exactly what industry needed: a successful graduate who understands industry and can teach customers why their products are the best solution to their problems. Industry needed a degree that would prepare people to learn fast, solve customer problems, and “get the order.” The Industrial Distribution Program was designed to do just that. Within an impressive department, within a distinguished college, the Industrial Distribution Program was off to a notable beginning.
In the late 1950s and early 1960s, distributors were still mostly regional and family owned. Hot topics of the day included succession planning, how to properly pass the reins of the family business to sons and daughters, and how to fill the void of a former founder. Many distributors began to sell their businesses. Mergers and acquisitions grew in popularity during this period. However, the most important issue was the same as it has been throughout the history of distribution, and the same as it is today for that matter, finding and recruiting qualified people.

While the demand for a college-trained salesperson in distribution seemed obvious to some, many were not so sure. The normal apprentice program of an outside salesperson had always consisted in some form of first working in the warehouse, then on the counter, then inside sales, and finally outside sales. The process took 5–10 years and had always worked well. “If it’s not broke, don’t fix it.” In fact, this is still an adequate process for producing outside salespeople today. However, it alone no longer attracted the numbers or talent it had in the past, and throughout the first decade of the Industrial Distribution Program at Texas A&M, changes in industry would point to the need for a new type of salesperson. During these years, industry would learn more about education at the college level, and education would learn more about distribution. The introduction of education and industry would be fostered by the Industrial Distribution Program at Texas A&M.

Where is the young and ambitious talent?

The GI Bill allowed many returning veterans to attend college, including those that served during WWII and the Korean War. As college attendance grew among veterans, it grew among other young men and women as well. Many ambitious-minded youth were now recognizing college as a better avenue to begin their careers. If distributors wanted to hire one of these ambitious young men and women, they would now need to hire a college graduate.
time in the warehouse and other functions before being in outside sales. But what many distributors did not know in the 1950s was that this apprenticeship could proceed more rapidly with an individual who had already spent four years preparing for the assignment. As ID students began to enter the workforce, this became more apparent. Early successful graduates include Steve McKenney ('59), and Tom Reid ('61), who each served as president of Briggs Weaver, a large and successful industrial distributor.

Early graduates in the Industrial Distribution Program had no problems finding jobs in the first decade, but not all jobs were with industrial distributors. Manufacturers had a similar need for people with technical sales ability. Since they were accustomed to hiring engineers, they were prepared to pay a premium for ID graduates.

New Products

Early supporters did so out of a desire to help young people and because they recognized that with their industry changing, new pools of talent would be needed. More people were attending college, and the demands on the technical salesperson were changing as well. The new breed of salesperson would still need to possess that rare combination of mechanical aptitude with the ability to relate to people. In addition, the new salesperson would have to learn new products faster than ever and learn new forms of transacting business.

In 1957, all Americans were disappointed to learn that the Soviet Union had launched the first satellite. With Sputnik in orbit, the United States government would act quickly to increase spending on technology. The Space Program, government labs, private companies, and universities all received additional funding to increase the level of technology in America.

With increased national defense spending, increased personal consumption, and increased government funding of new technologies, new products were being developed at an accelerated pace. One industry observer in 1961 noted that over half of the products available in that year did not exist ten years earlier.
Because new products provided new solutions to customer problems, distributor salespeople needed to learn these new products as fast as they were developed. The engineering course work in the Industrial Distribution Program provided students the technical skills they would need to develop their product knowledge.

Classes were taught in materials, products, and manufacturing processes. These courses gave the student a better understanding of the materials that were used in industrial plants, some specialized products used in certain industries, and an understanding of the processes in which these materials and products were used. Materials classes included General Chemistry, Mechanics and Materials, Wood Craft, Sheet Metal, Industrial Materials and Manufacturing, and Physical Metallurgy. Product classes included Applied Industrial Electricity, Welding and Foundry, Machine Shop, and Cabinet Making. Manufacturing process classes included Development and Practice in Industry, A Study of Modern Industries, Industrial Accident Prevention, Foremanship and Supervision, Product Engineering, Statistical Control of Quality, Production Control, and Factory Layout.

New Technologies and Services

Product knowledge coupled with the ability to learn new products quickly was extremely important but was only one aspect of the new skills needed for sales in distribution. New methods and concepts were surfacing in both the selling process and the way business would be transacted.

New sophisticated purchasing managers recognized the service provided by the distributor and were no longer basing a large portion of the buy decisions on only the price of the product. Salespeople had always been more successful if they formed a partnership with their customers, but this process was becoming the real focus. To be successful, salespeople would need the ability to sell the services the distributor provided. Selling the value added by distribution has and always will be an important role for the distributor salesperson.

Customers partnering with distributors found efficiencies. To increase these efficiencies Electronic Data Processing (EDP) was introduced to distribution. “Punched cards” and “data phones” were used to transmit orders over phone lines. These punched cards were inserted in a data transmitter at the customer’s site. The transmitter would convert the data into signals that could be transferred over phone lines. The data would be received by the distributor, converted back to punched cards, and the order cycle would begin. EDP was the forerunner for what is referred to today as Electronic Data Interchange, or EDI. The goal of this process was to reduce paperwork for both the customer and the distributor. If implemented properly, this would allow...
The ID students took courses in business fundamentals, allowing them to navigate through the negotiations needed for the new types of selling and business transacting that was growing in the industrial distribution industry.
a more efficient and reduced order cycle time. By 1964, several customers were giving priority to distributors with EDP ability. In that year, one industrial customer noted that over 400 suppliers had been dropped from the approved vendor list because they lacked this capability.

Although data phones never really worked to achieve the efficiencies that were sought, and many companies wasted a lot of money on their investment, the need for reducing order cycle time became apparent. Manufacturers, distributors, and customers learned to work closer together to work to achieve this goal.

With the reduced order cycle time, a closer partnership, and recognition that the distributor was better suited to manage inventory, customers began to demand “stockless purchasing.” The idea behind stockless purchasing was that customers would not buy industrial products and store them. They would only buy the product when the product was needed for the plant. This concept has evolved into today’s “just-in-time” inventory, or JIT. In other words, the products would not be purchased to be put in stock, i.e. stockless purchasing.

With stockless purchasing, more communications and greater commitment was needed between the customer and the distributor. The concept of “contract buying” came into greater focus during these years because a longer time frame was needed to recoup the costs of some of these new programs. Distributors would only commit with a guarantee of a certain amount of business over a certain amount of time. Customers also believed that with longer commitments, the increased volume of the purchase would translate into not just lower prices but lower overall costs of purchasing. Contract buying still plays a major role in distribution today.

With value added selling, EDP, stockless purchasing, and contract buying, purchasing managers and engineers were no longer the only people involved in these industrial product transactions. The finance department and other executives now had more involvement. The new industrial distributor salesperson would need to add a third leg to an already rare combination of skills. Along with mechanical aptitude and the ability to relate to people, the new salesperson would need a firm understanding of business concepts.

At Texas A&M, ID students were taking Business Administration classes, including Marketing, Business Law, Insurance, Wholesale Merchandising, Accounting, Economics, Marketing Industrial Products, Salesmanship, and Sales Management. These courses taught the ID graduate business fundamentals, allowing them to communicate the technical functionality of their product solutions in business terms as well as navigate through the negotiations needed for the new types of selling and business transacting that was growing in the industrial distribution industry.

The combination of business and engineering classes has been one of the hallmarks of the Industrial Distribution program. The course mix helps generate the well rounded individual needed in so many positions within industries buying or selling industrial products. However, one class was needed to help bring all the education together, Industrial Education 444 – Industrial Distribution.

Industrial Education 444 – Industrial Distribution was designed to introduce students to the distinguishing characteristics of the industrial distribution industry, including the most pressing current issues. Dr. James Boone was the professor for the class from 1956 to 1969. He was chosen in part because one of his uncle’s was one of the founders of Rex Supply and another uncle was a manufacturer’s representative.

Dr. Boone called members of the Houston Industrial Distributors Association (HIDA), members of the Southern Industrial Distributors Association (SIDA), and other supportive distributors of the early days, and invited them to be a “Professor for a Day.” Dr. Boone recalls being fascinated by the industry members’ passion for their chosen field and desire to pass on their knowledge to the students. Today Industrial Distribution 444 is still the capstone course for the ID Program. While no longer exclusively taught by members of industry, the topics covered continue to be the most pressing current issues. Topics like “Leadership,” “Lean Distribution,” and “Optimizing
Distributor Profitability” reflect not only current issues but faculty research with local and global firms in this capstone, project oriented course that seeks to put ID students on the cutting edge as they leave the University. Like many Industrial Distribution courses today, industry members are still invited to be a “Professor for a Day.”

The ID Program found its niche

The course curriculum with a combination of engineering and business classes, capped with a class taught by the industry and knowledge taken from distributors themselves, provided the perfect foundation for first decade students in the ID program. They proved to be well suited to learn new products, communicate their solutions effectively in business terms, and navigate the new forms of selling and transacting business that was sweeping the industry.

The curriculum was well suited and few changes were made during the first decade. However, the description of the program in the course catalog was changed to recognize the growing role of the industrial salesperson. The 1962–1963 catalog used the following to describe the Industrial Distribution Program:

Industrial Distribution prepares men for industrial technical sales. The program offers preparation in the methods of producing and distributing industrial products. It also provides an understanding of the personnel and human relations problems associated with the distribution of the products of our vast industrial and manufacturing system.

The program is oriented toward industrial and technical courses because the graduate will be selling industrial tools, equipment, and supplies to industrial centers and contractors. His relationships will be with executives, management, engineers, scientists, and craftsmen.

This is one of the few industrial distribution programs offered in the United States. Graduates of this four-year program receive the Bachelor of Science degree in Industrial Distribution.

In 1963, the name of the Agricultural and Mechanical College of Texas was officially changed to Texas A&M University. The Industrial Distribution Program was well positioned in the prestigious College of Engineering in a growing university. Anything was possible, and success was certain.

With the success of early graduates, many distributors were inquiring about how to recruit these students. Technically-oriented sales people were in high demand. The program was well poised to grow. By the end of the first decade, 47 graduates had received degrees in industrial distribution—10 in 1966 alone. One salient fact was learned about these graduates by the end of the first decade. Many had successful tenures in sales positions but were no longer in sales. They were managing distributor operations. As the next decade of the program started, the need for professional management in the distribution industry would be a major theme and would expand the role of the Industrial Distribution Program Graduate.
In 1972, while reflecting on his 50 years of experience as a distributor owner, one industry member noted that what makes distributors successful in the 1970s is the same as it was in 1922, keep the customer happy. The statement is still true today. The only thing that has changed is what makes the customer happy.

While the main functions of an industrial distributor have not changed, distributors have continually dealt with change. The issues that defined the first decade of the ID program were still prevalent during the second decade of the program, but the industrial distribution industry was confronting many new opportunities and threats. Difficult decisions were needed, and a new era was forming in distribution, an era of professional management. Industry needed new managers and needed new employees to possess management potential. The best and brightest minds were pursued. Industrial distributors that hired graduates from the Industrial Distribution Program at Texas A&M found their source for potential managers. The program would continue to fill the growing need for technical salespeople but would respond to industry by further preparing the graduate for and recruiting more students with the potential for distributor management.

Many of the new issues in distribution would require comprehensive planning and implementation by management. Some of the issues included the possibility of the conversion to the metric system in the United States. In the 1960s and 1970s, Congress reviewed several bills that proposed a coordinated national conversion by 1983. Other issues included how to deal with product and fuel shortages and rising costs, while maintaining good customer service. These issues had serious implications for distributors, but the main issues of the day were the growing use of computers, new warehouses and warehousing technologies, and mergers and acquisitions.
Distributors Start Becoming Computerized

At a time when computers were becoming more affordable, their demand in distribution was growing. The term “mini computer” became common by 1973 and its reduced size and cost allowed more distributors to take the plunge into computers. Computers were needed at the distributors, not because they reduced the need for personnel through automated data processing (ADP) of paperwork, but because they allowed better management of inventory information.

Distributors were getting pressure from both customers and manufacturers to stock more inventory. While inventory had always been a core competency of the distributor, better analysis would be needed. The potential that industry experts publicized computers could bring to the industry has not yet been fully achieved, but in the late 1960s and early 1970s, computers coupled with the increasing use of universal product codes (UPCs) allowed distributors to know a little more information, including which products were moving and which products each customer was buying.

Competent management was needed to make the decision of whether distributor’s operations were ready to add computers. Earlier, many distributors moved too quickly to add technologies that the operation was not prepared to implement. And many new technologies were outdated before the costs were recovered, such as the data phone and punched card.

If the decision was to add computers to the operation, managers would need to decide which system to add. New options in the computing world were available every day. Distributors could invest in an expensive main frame, a “mini” computer, or still have an outside firm process their data.

Once the data was produced, managers would need the ability to analyze and make decisions on how to use the data. Terms such as the economic order quantity (EOQ) and reorder point were becoming more popular within distributors. While reorder point had been around since the mid 1800s and EOQ since the early 1900s, access to proper data made their use as part of distributor inventory management more common in the late 1960s. This allowed management to make decisions about what and how much inventory to keep in the warehouse.

A New Look for Distributors

Distributors were changing the design of the warehouses as well. In the late 1960s and early 1970s distributors began to move from downtown multistoried warehouses to single story warehouses in the suburbs. This resulted from both an increase in the value of downtown real estate through urban
renewal projects and an increased need for the distributor to more efficiently handle inventory.

As the distributor was asked to handle more inventories for customers and manufacturers, old downtown locations were no longer sufficient. Over the years, distributors had grown in size, and the only space available to grow was the next floor above. This created inefficiencies because order picking required covering several floors. One distributor noted in a 1969 article in *Industrial Distribution Magazine* that happiness was “four fewer floors.”

New single story warehouses allowed distributors to take advantage of new warehousing technologies to gain the needed efficiencies. By 1973, many distributors were using computers to perform warehouse modeling to further improve efficiencies. Return on investment was improved from both the efficiencies of the new warehouses and the reduction in capital from the sale of the old downtown locations that had increased in value.

**Mergers and Acquisitions**

Return on investment (ROI) became more of a management measurement tool during these years because of mergers and acquisitions (M&A). Wall Street was paying more attention to distribution and more money was available for investment in distribution. Distributors that had a greater return on investment had more capital to grow through mergers and acquisitions.

By 1973 the growth of big business or “distributor chains” was apparent. Many distributors argued that distributor chains were just a fad and provided little value to customers. While customer relationships are still very important in distribution and are local in nature, few today would agree that the M&A activity was just a fad. M&A has continued to grow, and by 1974 many investment banks were recommending distribution as a good growth and non-cyclical investment. The distributors that performed the best and attracted the most capital were those with the best management.

**The Need for Professional Management**

With an increase in the complexity of business decisions being made within distributors and the increased size of distributors through mergers and acquisitions, professional management within distribution became more necessary in the late 1960s and early 1970s. Many early graduates from the Industrial Distribution Program at Texas A&M were being asked to leave their sales positions and provide the management distributors needed.

In the past, distributors only needed the ID Program to train for technical sales. If the graduate was later asked to enter management, distributors would provide the necessary training for the transition. While the former graduates learned about business and had had success in management, distributors
Many early graduates from the Industrial Distribution Program were being asked to leave their sales positions and provide the management distributors needed.
were no longer content. They wanted the graduate
to enter the field of industrial distribution with the
training necessary for the move to management.

One industry leader during these years had a vision
of what he thought the program should produce. He
felt that the program should grow in the number and
quality of students. He sought to form a relationship
with the program and support his initiatives by
both hiring graduates and financially sponsoring
the program. He wanted the students to be the best
and brightest. During these years, the Industrial
Distribution Program at Texas A&M had no greater

The Change in Management of the Program

The timing of Mr. Thompson’s increased involvement
in the program could not have been better. In 1969,
a major change took place at Texas A&M. That year,
the Department of Industrial Education was moved
to the newly created College of Education. A new
Department of Engineering Technology was formed in
the College of Engineering to house the Engineering
Technology Program and the Industrial Distribution
Program. Dr. James Boone would make the move to
the new College of Education. Dr. Boone had served
the program well, establishing a
strong link between the program
and the industry it served.

With his departure, the Program
Coordinator position in the ID
Program became vacant. The
position would quickly be filled in
1969 by a native Texan and graduate
of the University of Missouri’s
doctoral program in Industrial
Education, Dr. Don Rice.

Industry members embraced the
new coordinator. Dr. Rice recalls
an event in his first few weeks on
the job. J. R. Thompson entered
Dr. Rice’s office and simply stated,
“My name is J. R. Thompson with
Warren Electric. I helped found this
program, and it is too important to me
for you to screw it up. Let me know
what I can do to help you realize the
importance of this program and how I
can assist in improving the program.”

Dr. Rice embraced industry’s
interest in being more involved with
the strategy of the program and formed

Industry leaders
continued to be
supportive of the
Industrial Distribution
department and aided
in the improvement
of the program
with continued
involvement.
the Industrial Distribution Advisory Council. Advisory councils were being used in the distribution industry to bring manufacturers and distributors closer. The council was designed to do the same between the program and industry. It was comprised of progressive thinking distributors and at least one manufacturer. The key theme of the council meetings was if these companies were going to hire an industrial distribution student in five years, what they would want the student to know. Other topics were discussed, but all focused on how to improve the quality and grow the size of the program.

Mr. Thompson and other industry leaders believed that three things were needed to increase the number and quality of students in the ID Program: renovation of the buildings and equipment used in the program, a more rigorous program, and financial aid in the form of scholarships.

The first step Dr. Rice took to achieve a change in the strategy of the program was to change the description of the program in the course catalog. To reflect the changes taking place in industry and the desired direction of the program, the 1971 course catalog had the following description for Industrial Distribution:

**Industrial Distribution Option**
(Engineering Sales)

Industrial Distribution (engineering sales) prepares men for sales, sales management, and mid-management positions with wholesale distributors, who purchase, warehouse, sell, distribute, and service a wide variety of industrial products. Their customers include original equipment manufacturers, petrochemical corporations, refineries, construction contractors, and other industrial product consumers.

The day to day challenges faced by the distributor requires him to be a professional with many capabilities. To fulfill this demand, the curriculum provides for study in business, communications, data processing, engineering, human relations, and technology. This knowledge is applicable to the graduate in his relationships with executives, managers, engineers, scientists and craftsmen as he goes about assisting them in their application of his operations, business, and product knowledge. Essentially, the industrial distribution graduate must become a special assistant in the other man’s business — a challenging and rewarding profession.

This is one of the few industrial distribution programs offered in the United States. Graduates of this four-year program receive the Bachelor of Science degree in Industrial Distribution.

Long before mission statements were common in business, Dr. Rice used the course catalog to describe the aims, values, and overall plan of the program. He wanted potential graduates to have the most up-to-date description of their career after graduation.
Originally built as the Mechanical Engineering Building in 1919 at a cost of $75,495.64, it was renamed after Emil Jerome Fermier, the onetime head of Mechanical Engineering.
A New Look for the ID Program

In 1972, J. R. Thompson provided the initial funding needed to renovate the building soon to be used by the ID Program. Up to that point, it was more common for A&M to raze and build new buildings, but a careful inspection by Dr. Rice convinced the faculty that Fermier Hall should be saved and renovated. Dr. Rice noted, “The building was in good shape, but if we wanted to attract the best and brightest minds, renovation would be needed.” Fermier was originally built as the Mechanical Engineering Building in 1919 at a cost of $75,495.64. It was renamed after Emil Jerome Fermier, who was the onetime head of Mechanical Engineering.

During the renovation in 1972, Fermier Hall was completely stripped, leaving only the exterior brick, floors, and plaster walls. Everything else was new and modern. Although the original plans for the building included an elevator, it was not added until the 1972 renovation. Where the elevator is now, originally a giant pendulum was suspended. The pendulum was moved to the Zachary Building where it resided for several years, giving way for the installation of the new elevator, a valuable piece in the modernization.

Renovation of Fermier Hall was completed in 1974. As distributors renovated their warehouses, the building housing the ID Program received a modern update as well. With a renovated building, more students would be attracted to the program. Industry executives and Dr. Rice agreed that more was not necessarily better. They wanted to attract the right type of student; one that could handle the difficulties they would incur in industry after graduation. To accomplish this, core ID courses were altered to become more challenging. Advanced material was added, but most of the changes were in the forms of demanding tests. As word spread of these tests among students, only those serious about a career in industrial distribution would consider entering the program.

Scholarships Increase and the Program Begins to Grow

Industry encouraged the increase in difficult class work but did not want to lose good potential recruits. To encourage those that would have a good career in industrial distribution to enter the program, many companies provided scholarships. In those days, Dr. Rice used only one criterion to determine if someone should receive a scholarship: could the applicant succeed in sales or as a branch manager for a distributor.

During the second decade of Industrial Distribution at Texas A&M University, the program would continue to fill the growing need for technical salespeople but would respond to industry by further preparing the graduate and recruiting more students with the potential for distributor management. An increased involvement from industry helped raise the number and quality of the students. By 1976, 230 graduates had received Industrial Distribution degrees—183 in the past ten years, and 32 in 1976 alone. This growth was impressive but would be outpaced in the next decade as the program was marketed to more industries and more companies became aware of the quality of the students.
As the third decade of the Industrial Distribution Program began at Texas A&M University, the industry it served faced many familiar and many new issues. These issues would dominate trade shows and distributor conferences and, as always, played a role in shaping the ID program.

One familiar problem was inflation, causing debates on inventory valuation and tax laws. LIFO, or Last-In-First-Out, method of identifying cost of goods sold had been around a while, and many distributors were using it to lower their tax bills and lower the book value of their inventory. These tax savings could then be used to invest in new business and technologies.

As always, new technologies filled the air at conferences. Computers, Electronic Data Processing, and other technologies continued to grow in number. If properly implemented, many added increased efficiencies to distributor organizations, and as the cost of these technologies continued to fall, most distributors had access. Efficiencies allowed distributors to handle the growth in business experienced through these years, especially distributors in the South.

**Business Migration**

The migration of many businesses from the northeastern and midwestern portions of the United States was quite prolific. Reasons for the moves included the climate, cheaper real estate, and less unionization. A 1979 article in *Industrial Distribution Magazine* cited that two of the changes in the South that allowed for this transfer of business were the greatly improved educational system and the interstate highway system, both of which Texas A&M University could claim some credit for. However, Texas A&M University’s primary service to the industrial distribution community continued to be providing personnel.
Distribution Marketing

Finding good people may always be the number one concern for distribution, and it certainly was during these years. Although the Industrial Distribution Program continued to provide talented students to the industry for technical sales and professional management, the number of people entering the distribution industry could not keep pace with the growth of the industry. People in the industry would have to do more to keep up. One of the answers industry brought to this problem was converting salespeople into marketers.

The definition of sales and the definition of marketing provided by the American Marketing Association highlight the differences between the two. They define sales as any number of activities designed to promote customer purchase of a product or service, including assessing customer needs, presenting product features and benefits to address those needs, and negotiating price, delivery, and other elements. They define marketing as an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization. Many successful distributor sales people had been fulfilling this marketing role for a long time, but others needed to learn from their example.

In the past, salespeople could be successful only by understanding their customers and the products that would satisfy problems they faced. Now salespeople needed not just this aspect but also needed to be managers of their customers and the products they sold in their territories. They needed to participate in decisions of the product mix their firm would support. They needed to not only be aware of their existing customers in their territory, but also potential customers and new trends that might affect their territories. Although the most successful salespeople had been using these marketing concepts for years, the bulk of the industry had a lot to learn about the distributor and the distributor sales force’s role in the marketing process.

As ID faculty began to learn more about the role of marketing within distribution a couple of things became clear. First, a degree in marketing would teach these concepts but would not provide the technical education needed by distributors. Dr. Rice stated in an interview that, “Distribution is a service industry, and since we deal in technical products, it helps a salesperson to solve customer problems if they know how a casting is made, how a valve is machined, something about the materials that go into the packing, how it might be welded into the line, and something about the corrosive fluids you might pump through it.” Marketing needed to be taught, but not at the expense of engineering concepts.

The College of Engineering provided the technical learning to ID students, while the College of Business taught the business aspects. With marketing and other business subject matters playing a larger role in distribution sales and management, many issues within these subject matters were becoming more specific to distribution. Since distributors were
FOLLOW-UP STUDY OF ALL INDUSTRIAL DISTRIBUTION MAJORS WHO GRADUATED FROM TEXAS A&M BETWEEN 1976 AND 1986

Marketing the Program

WE WHO EMPLOY I.D. GRADUATES

Figure 1.5

WHERE THE GRADUATES ARE EMPLOYED

1976 to 1986 — Marketing the Program
facing industry specific issues, some concepts needed to be taught by ID faculty.

In 1977 two courses were added to the curriculum. The courses were ENTC 240 – Introduction to Industrial Distribution, and ENTC 440 – Industrial Distributor Operations. This addition would prove significant, because the new courses would be taught by Industrial Distribution faculty, allowing more issues such as the distributor’s role in the marketing process to be introduced to students.

Marketing the Program

The second thing learned by the faculty in introducing marketing concepts to distribution was that better marketing could be done within the program itself. Although the technical training provided in the program was well rounded and useful in many industries, the main recruiters from the program tended to be only companies selling products for use in industrial settings such as plants and original equipment manufacturers.

A letter from Stephen Summers of Summers Electric to Dr. Rice in 1975 made this clear. In the letter, Mr. Summers wrote that he regretted that his company was only 20–30% industrial and was not an ideal candidate to hire ID graduates. On the contrary, Dr. Rice believed the company was a perfect match for ID graduates.

In the early 70s, the faculty had attempted to enter new industries with concentrations. The first attempt was a concentration in construction equipment. The faculty learned from this attempt that the current curriculum was already sufficient for those entering this industry, and the concentration was not needed. The description of the program in the course catalog stated that those selling to construction contractors and other industrial product consumers were possible employers of ID graduates.

The hands-on technical courses provided a general education of materials and processes that could be used in many industries, but Mr. Summers’ letter was proof that an analysis of potential employers and how to market to these employers was needed. Concentrations would be needed to reach certain industries, but during these years many companies from various industries that would be a good employer match with ID students had not been introduced to the program. Better marketing was needed by the program.

The Program Hits the Road

During these years, the faculty began to visit more distributor associations and attend more trade shows to spread the message of the program. They would take some students with them to most of these events. As has always been the case, nothing sells the Industrial Distribution Program like the students themselves. If employers meet the students, they will probably want to hire them.

While attempting to return during one student trip to Warren Electric, the university-provided van would not start. Mr. Thompson asked why they did not have better transportation. Dr. Rice responded that ID had to accept what the university provided unless they had
their own van. Mr. Thompson provided a check for $12,000 on the spot for the purchase of a van for the use of the Industrial Distribution Program. Many miles would be driven in the van transporting students, greatly aiding the marketing strategy of the program.

The marketing strategy was simple—provide a highly demanded product, an Industrial Distribution graduate, and make sure the companies that could benefit from this product understood the product and knew their value and where to find them.

The strategy worked. Many newly introduced employers began to recruit from the program. By 1985, Summers Electric employed over 30 ID graduates, just eight years after being introduced to the program. The Industrial Distribution Program at Texas A&M University had successfully expanded its territory.

**Explosive Growth**

This greatly expanded the number of companies recruiting ID graduates, which increased the number of students willing to join the program. Although the size of the program grew to 450 students, the need for people with that rare combination of mechanical aptitude and the ability to relate to people continued to outpace the program. The program grew as fast as resources and facilities allowed. Of the roughly 1,200 students that had graduated from the program in the first three decades, over 1,000 graduated during the third decade, 143 in 1983 alone. As proof that demand was still greater than supply, many of these graduates received between three to five job offers.

**Assisting Other ID Programs**

The faculty were proud of their accomplishments but regretted not being able to fill all of the job offers and began to work with other schools to develop ID Programs. Many of the ID Programs administered at other universities today received initial advice and council from the faculty at Texas A&M University during these years.

Although the faculty spent a great deal of time visiting companies, associations, and other universities, they did not lose focus on what made this program successful, continuing to listen and adapt to industry.

**Upgrading the Equipment and Facilities**

Industry wanted students to have the most up-to-date technical knowledge possible. Although his company focused on electrical products, Mr. Thompson provided $25,000 for the purchase of three new lathes. The existing lathes appeared impressive to many but were old and did not hold close tolerances. With the introduction of the new equipment, the older lathes no longer appeared impressive, and the faculty began to push for a complete renovation of the labs and the building.

Mr. Thompson again provided the initial funding for the renovation by issuing a check for $25,000 in 1979. The funds allowed the Texas A&M University Board of Regents to consider the renovation of what was then known as the Mechanical Engineering Shops. The board approved the funding of $1 million for building renovation and $600 thousand for new equipment. For all his generosity to the program, the building was renamed in honor of J. R. Thompson.

At the request of industry, two courses were added to the curriculum in 1981. On the technical side, to address the growing use of computers in industry, ENTC 380 – Computer-Aided Manufacturing was added. On the business side, ENTC 340 – Manufacturer-Distributor Relations was added. Cooperation between distributors and manufacturers had always been a point of discussion, but with marketing concepts such
who joined the program. Dr. Rice concurred. Many of these women proved very smart and were not afraid to get their hands dirty in the labs. Sheri Ryman, an ID student, won Miss Texas in 1981. The caption in the Battalion read “Aggie Welder Wins Miss Texas.”

The Manufacturers

The other change in the description came in 1979. Although the program had been built for and by distributors, over 20 years of the program proved that manufacturers that sell through distribution would continue to be a major force in the recruitment of ID students. Although distributors had raised their starting salaries over the years, manufacturers had more experience at recruiting and continued to hire their share of graduates. To reflect the potential that a student would work for a manufacturer, the description was changed.

The Professional Association for Industrial Distribution

Another significant change during this decade was the creation of the industrial distribution student organization PAID. The Professional Association for Industrial Distribution (PAID) provides a forum for students, faculty, former students, and companies who manufacture and distribute goods and services. PAID was originally formed in 1983 as a coordinated effort between ID students and faculty under the guidance of Dr. Demo A. Stavros, Mr. Gerald A. Stone, and Dr. Mike Workman.

Under its constitution, PAID has four main goals:

1. To develop the character of students pursuing a career in the practice of Industrial Distribution.
2. To develop and refine students’ skills preparing them for a career in Industrial Distribution.
3. To coordinate services and activities for the students in the Industrial Distribution Program.
4. To act as a liaison between the students, faculty, and companies who manufacture and distribute goods and services.

As territory analysis and product mix analysis becoming more popular, manufacturers and distributors could no longer afford to not cooperate.

Women Make Their Mark

Along with lab and building renovations, and changes in the curriculum, a couple of changes in the program description in the course catalog took place. The first change was the addition of the word “women” in 1976. Since A&M had not been coeducational for very long, much of the language used throughout the course catalog did not include the use of the word “women.” While the description was not meant to exclude women, the program made the change to encourage women to join the program to help fill the need for women in the industrial distribution industry. Dr. Clint Bertrand, a faculty member in Engineering Technology from 1953 through 2006, commented that the single biggest change in the program over the years was the increase in the number of women who joined the program.

“The single biggest change in the program over the years was the increase in the number of women who joined the program.”
—Dr. Clint Bertrand
PAID, originally formed in 1983, provides a forum for students, faculty, former students, and companies who manufacture and distribute goods and services.
The original PAID members were ID students from the Engineering Technology Society (ETS), which also hosted members from the Industrial Technology and Engineering Technology Programs. Upon PAID’s inception, the organization considered a number of names such as SIDA (Student Industrial Distributor Association) and IDEA (Industrial Distribution Education Association). They communicated with students at University of Houston, University of Alabama at Birmingham, and Clarkson University, to come up with a common name but were unsuccessful at coming to an agreement. Each university decided upon its own organization’s title. At that time at A&M, independent student organizations were not allowed on campus without a “faculty” sponsor who attended meetings and helped organize student activities.

In its early years, faculty arranged everything from scholarships to internships, student placement, field trips, and job placement. The organization became an entity when the students were given responsibility for the PAID senior banquet held each year in April. The banquet was originally sponsored by the Houston Industrial Distributors Association (HIDA) and the North Texas Distributors Association in Dallas/Ft. Worth. Companies would charter a bus and come to campus where they would eat and converse with students and faculty. The companies provided summer jobs and internships, and many hired ID students full time after graduation. This was the beginning of PAID’s successful student/industry relations.

Today, PAID takes the initiative to arrange many events including banquets, social events, business meetings, power lunches, and speakers. These activities provide an environment outside of the classroom for students to meet their professors and fellow students and have significant discussion with individuals from industry.

A new banquet called the “Holiday Banquet” is sponsored by industry, is held in November, and has attendance in excess of 500 students and industry guests. This gala event is used to recognize those who have given to the University to support Industrial Distribution education. Award recipients have included the Thompson family (the J. R. Thompson Chair and numerous other gifts), Rockwell Automation (the Rockwell Automation Laboratory and numerous other gifts), the Read family (the Thomas and Joan Read Center for Distribution Research and Education), the Andrews family (the TTI Excellence Fund and numerous other gifts), the Bruce family (the Leonard and
Valarie Bruce Chair), and R. C. Womack (endowment for the Bosch Rexroth/R. C. Womack Laboratory) among many others who built the ID Program.

One of the original objectives of PAID, the Resume Review Pamphlet, is carried on today. Resume Review provides great opportunity for student resumes to get exposure to industry. Resume Review is sent to over 500 companies nationwide. It is also accessible on the web, giving companies the opportunity to learn more about A&M’s ID students and semester graduation dates.

In the early years, ID faculty and students were closely associated with the HIDA which included companies such as Briggs Weaver, Rex Supply, Drago Supply, Moore Supply, Welders Supply, Industrial Oxygen, Cottingham Bearing, Warren Electric, and others.

Today, membership is highly encouraged and open to all ID majors. A full membership in PAID provides the following privileges: voting, holding office, representing the society, and attending all general association functions. General meetings are held throughout the semester, usually on Thursdays. The meetings cover a wide spectrum of topics beneficial to students. Each year, a number of guest speakers visit the monthly meetings and provide input from industry.

In 1996, PAID began a major initiative: a career fair for Industrial Distribution students and recruiters. They became the only student organization to host their own career fair. The first Career Fair had 27 companies and was considered a resounding success. The annual Career Fair now hosts over 80 companies from all over the nation. Over 120 representatives from the best companies in their respective industries attend and meet, interview, and hire ID graduates. Students are paired up with the industry of their choice for a golf tournament before the Career Fair. This provides an excellent opportunity for students to become familiar with various companies and for companies to meet the students on an informal level. Career Fair is held each year in February.

During the third decade of the Industrial Distribution at Texas A&M University, the ID Program experienced its greatest growth. Much of the growth could be credited to the use of marketing to expand the program. Industry has always provided direction to the program, but this time, industry not only advised on how to improve the curriculum, but also taught the faculty a concept that improved the reach of the program. As the fourth decade was about to begin, industry involvement in the program was once again about to strengthen.
After flying home one night from several days of meetings with several top executives from various industries, Dr. Rice sat in his recliner contemplating how the trip would change the future of the Industrial Distribution Program at Texas A&M University. At 10:30 p.m., with a lot on his mind, Dr. Rice walked to the phone and called Dr. Workman. The two agreed to meet early the next morning for breakfast.

At breakfast, Dr. Rice asked one simple question, “With the industrial distribution industry continuing to face rapid change and looking for not only new employees with new ideas but a way to improve the knowledge of their current employees, shouldn’t the Industrial Distribution Program at Texas A&M University be the leader in disseminating new knowledge to the industry?” Dr. Workman agreed, and the department went to work to accomplish the task.

The distribution industry faced many issues during the fourth decade of the program. Issues such as captive distribution, succession planning, charging for services, vendor managed inventory (VMI), and the Comprehensive Energy Policy Act of 1992 each had their effects on distribution. However, the most critical issues faced in distribution during this time was the growing use of new technologies, the globalization of business, the growth in the demand for broad line distributors, the Quality Process, and as always, the need for talent within distributor companies.

Technological Advancements

As predicted, the use of new technologies continued to grow during these years. While some still shied away from new forms of technology, many were now prepared to embrace them. Electronic Data Interchange (EDI) gained great popularity, and the use of bar coding grew among large distributors, especially those using regional distribution centers. CD-ROMs became an alternative to mass production of catalogs, and by 1992 email was adding another form of communication between distributors and customers.
While distributors in some industries were taking advantage of the global marketplace for sales, most distributors were mainly affected by the access to international products to sell here in the US.
It was during this period that the debate about the possible replacement of salespeople, and distributors in general, with electronic communication and other technologies started getting more attention.

Technology certainly had its impact on inventory and warehouse management as well. With the use of bar codes and a central computer system to assign and store data, random slotting was possible, allowing distributors to maximize the use of their shelf space. Cycle counting became feasible as well.

Technology showed its dark side to distributors during these years with the growing concerns from hackers, viruses, and junk email. Since data are critical to distributors, the use of firewalls and “backing up” data grew in the distribution field.

**Globalization**

While distribution continues to remain local in nature, the globalization of American business was rampant during these years. Many manufacturers were moving their plants overseas to take advantage of lower production costs. While distributors in some industries were taking advantage of the global marketplace for sales, most distributors were mainly affected by the access to international products to sell here in the US. Talking points included antidumping laws, fastener quality laws, and the North American Free Trade Agreement.

While few distributors would meet the definition of global, many had become national. The Northern Industrial Distributors Association (NIDA) and the Southern Industrial Distributors Association (SIDA) responded to this trend by joining forces in 1988 to create the Industrial Distributors Association (IDA).

**Vendor Reduction and Integrated Supply**

After years of specialization, broad line distributors were once again in high demand. Vendor reduction had hit a climax, and single sourcing was on the rise. If a customer wants a single source to supply all of their MRO needs, then a distributor will need a pretty broad line card. Although the recession of 1991 slowed mergers and acquisitions, especially in the construction supply industry, many distributors were still finding ways to grow. Many of these growing distributors had broad line cards.

By the end of the fourth decade integrated supply was boasted as the future for distributors servicing large accounts. Integrators, or distributors with an integrated supply division, would take full ownership of a customer’s procurement needs for MRO supplies. If the integrator did not have access to a particular product line, secondary suppliers would be used. While the future of integrated supply and single sourcing were uncertain, many distributors expanded their line cards and formed alliances such as the International Supply Consortium, which included Cameron & Barkley, McJunkin, and Bearings, Inc. Partnerships such as this, vendor reduction, and integrated supply where the results of a new management trend—TQM.
No issue took the industrial distribution industry by surprise like Total Quality Management. TQM, along with Just-In-Time inventory, was credited with being the management style that led Japanese manufacturing past American manufacturing. It involved the use of documented processes and statistical process control to improve quality.

On the surface, TQM seemed to only be concerned with manufacturers, since they control the quality of the products produced. In fact, manufacturers spent the first few years of implementing quality programs by focusing on internal improvements. However, total quality control is more than just product quality. It includes process quality as well. Processes include the delivery of product, therefore many manufacturers began demanding that their distributor suppliers implement quality programs. By 1992, many distributors were pursuing ISO 9000 certifications as a way to communicate to customers and suppliers that a quality program was in place.

To accomplish the implementation of a quality program, distributors needed the support of and buy-in from their entire staff. Many distributor employees were already handling a large amount of work, and distributors struggled with finding the right personnel to pursue this task. As always, the need for top talent was touted as the top concern for the future success of distributors.

The People Needed for the Tasks

During its fourth decade, the Industrial Distribution Program at Texas A&M University graduated over 1,400 students, a great accomplishment with limited resources. By 1996, several other universities offered industrial distribution or similar programs. Even with an increase in supply of graduates, most students from Texas A&M’s ID Program had accepted jobs before graduation, and many had several jobs from which to choose. One student in 1996 had 25 job offers. Supply simply could not keep pace with demand.

Many employers sought the advice of the ID faculty on how to lure graduates to their companies. The faculty advised that salary alone was not enough incentive. Students had learned to look at the big picture and where they wanted to be in the future. In response, many companies that previously had no recruiting process began to promote warehouse and factory tours, sponsor internships, give lectures to classrooms, and implement training programs.

The advice seemed to work as those with better recruiting processes proved to have an edge in attracting top talent. These distributors now had more time and personnel to ascertain the new challenges facing the industry, challenges with which the ID department was committed to assist.
The Thomas and Joan Read Center

To accomplish the task of assisting distributors with these new challenges and becoming the leader in disseminating new knowledge to the industry, the department would need to work very close with members of the industrial distribution industry. Working with industry was nothing new. The department had always worked closely with industry through accepting advice on the ID curriculum and conducting research with companies using the knowledge of the faculty. However, a more active role was needed, and an elevated focus on research would be required. What resulted would have a lasting impact. The greatest change to the Industrial Distribution program during its fourth decade was the establishment of a new research center at Texas A&M University in September of 1986. The research center would become known as the Thomas and Joan Read Center for Distribution Research and Education, founded by a generous grant and support from the Read family.

The purpose of the center was to study topics crucial to distributors and disseminate knowledge learned from the research through the publication of trade journal articles, conducting continuing education, and introducing the topics in the undergraduate program. The center would provide information that could be used for benchmarking purposes and for ways to improve profitability. The research would be conducted, and continues to be conducted today, through funded projects and consortiums. Funded projects are performed for single companies or organizations that have a particular interest such as a study of the markets served by a particular association’s members. Consortiums are performed when the issue to research is bigger and has a greater focus than a single company or organization, such as the 1987 study on the implementation of the quality process in distribution.

The Distributor’s Quality Consortium was formed in 1987 with nine distributors and three customers of distributors. The focus of the consortium was “how to implement” the quality process within distribution companies, thereby eliminating waste and improving customer service, which combined leads to higher profitability.

The key ingredient to the success of the consortium was the focus on implementation. Since Americans started learning of the Total Quality Management principles used by the Japanese to outpace American manufacturing, seminars and conventions were jam-packed with the topic.

John Keough, Editor for Industrial Distribution magazine, tells of a joke that was popular in the late 1980s.

Three executives from England, Japan, and the United States were captured by headhunters in deepest Africa. The tribal chief said he would grant the request of each person before putting them to death. The English executive said: “I’d like to hear ‘God Save the Queen’ one more time.” The Japanese executive said, “I’d like to give a lecture on quality control.” The American, wryly glancing at his Japanese colleague, said, “My one request is that I be executed before him.”

Everyone was lecturing about Quality, but few were focused on implementation. Virtually nobody was focused on the implementation within distributors.
The success of the Quality Process Consortium proved that the Read Center would be an important factor in the distribution industry and the Industrial Distribution Program.
When the study was complete and the results were made public in 1989, after a nine month grant of exclusiveness to consortium members, companies were lining up to attend seminars conducted by the Read Center on the Quality Process. The five-day seminar was conducted as often as once per month with as many as 45 to 50 people in attendance.

Many were skeptical that a center at a university for researching topics in distribution was needed or felt the center was, at best, ahead of its time. The success of the Quality Process Consortium proved that the Read Center would be an important factor in the distribution industry and the Industrial Distribution Program.

**Continuing Education**

Distributors needed more training on quality and other new topics, and a feeling that doing your “perceived best,” might not be good enough. Distributors with the best information are able to make more educated decisions about emerging concerns. With research, the Read Center would be able to discover and disseminate new information to help distributors cope with the changing industry.

The Read Center began hosting as many as 20 seminars per year with around 1,000 people per year in attendance. Of the eight most respected consultants and educators in the industry, four were on the faculty at A&M, and the others were frequent presenters during the seminars. Students were invited to host and attend events in connection with the seminars, allowing more interconnection between students and industry.

A great deal of this was possible due to a generous gift of Paul and Judy Andrews of TTI that established the Paul and Judy Andrews Industrial Distribution Conference Center. The gift allowed the construction of a state-of-the-art conference room located on the seventh floor of Rudder Tower on A&M’s main campus. The Andrews Conference center is still the premier conference room on the A&M campus, frequently used by many including the president of the university.

The Read Center also improved the classroom teaching for undergraduates. As the faculty researched these pressing issues, they gained the knowledge to not only educate current members of industry but also future members of industry currently pursuing their Bachelor of Science degree (Industrial Distribution Students). To date, the Read Center is the only center at a major US university conducting research in Industrial Distribution.

**Changing the Undergraduate Curriculum**

In 1988, it was apparent that a greater focus on business related to distributors was needed within the undergraduate program. To accomplish this task, more industrial distributor-focused classes were added to the curriculum.

ENTC 244 (Fundamental Distributor Operations) replaced ENTC 440 as the introduction to topics related to operating a distributor. ENTC 440 (Distributor Profitability Techniques) was converted to focus on more specific issues related to profitability and how to improve profits within industrial distributors. With a
As technologies and other issues such as quality grew more important to industry, the Industrial Distribution Program at Texas A&M continued to change to respond to these concerns.

In 1993, ENTC 424 (Purchasing Applications in Distribution) was added to the undergraduate curriculum. The course was designed to give students a more complete understanding of the decisions used to determine when to buy, how much to buy, and where to buy. Topics included negotiations and logistical concerns.

In 1994, the Industrial Distribution Program at Texas A&M reached a size and stature that gave the faculty more control over courses. This was the first year of IDIS classes. IDIS, or Industrial Distribution, replaced ENTC, or Engineering Technology, in course designation for those courses related solely to industrial distribution. For example, ENTC 424 would now be known as IDIS 424.

Also, in 1994, IDIS 144 (Computer Applications in Distribution) was added so that while ID students were learning about computers, they could spend part of the time learning about the specific applications used in distributor firms. Computers were playing a bigger role in distribution. Now they would play a bigger role in the program.

As technologies and other issues such as quality grew more important to industry, the Industrial Distribution Program at Texas A&M continued to change to respond to these concerns. As always, the undergraduate program received updates, but the greatest change to the ID Program during its fourth decade was the establishment of the Thomas and Joan Read Center for Distribution Research and Education.

With the explosive growth of integrated supply, the use of the Internet, and other issues impacting distribution in the mid 1990s, one thing was concluded: research and the interaction with involved companies had shaped both the industry and the ID curriculum, and would continue to shape the two for years to come.
The Industrial Distribution Program and the Thomas and Joan Read Center were well established when entering the fifth decade. The Read Center had conducted many research projects for industry, but things were about to bust wide open. The convergence of Just in Time and the dot com threat was causing many concerns for distributors. JIT had caused an explosion in distributor services like inventory, and transportation and distributor margins were eroding fast. On the other hand, in spite of Wall Street’s attempt to disintermediate distributors, distributor business was growing at an unprecedented rate.

Distributors were making up for shrinking margins and growing service costs through increases in sales, but the economies of scale were starting to dwindle. The dot coms suggested that the extensive services distributors offered could be done away with or managed through logistics firms. Distributors were under real pressure. Many decided they needed to reduce their facility/inventory networks to bring costs under control. They were looking for distribution-specific solutions at a time when most research was focused on manufacturing and retail environments.

Dr. Daniel Jennings, the new Program Coordinator, worked with Dr. Workman to introduce young faculty to industry and solve some of these problems. The faculty launched projects, with industry support, in network and inventory optimization. These first projects greatly increased the faculty’s understanding of distributor operations as a result. The faculty, at this point, decided to introduce a new course that reflected the industry’s new interest in Supply Chain Management: Distribution Logistics (IDIS 314). The class focused on inventory, facilities, equipment, and transportation assets engaged to meet customer needs.

The first class was asked to study a real distributor environment. TTI, one of the world’s largest electronics distributors, opened its doors for the class to study its processes. The class spent a day with TTI (over 50 students) attending presentations and touring...
Research driven curriculum would lead to other innovations. Faculty introduced student projects into APICS contests and ID students cleaned up.
facilities. TTI executives, including the owner Paul Andrews, then came to Texas A&M at the end of the semester to see the students’ presentations on findings. Since several vice presidents and directors of one of the program’s most important supporters were in attendance, tension was high, and the faculty were a little nervous. In one memorable moment, the president of PAID told one of the faculty, “Make no mistake, we will not embarrass ourselves with this company!”

The presentation was a phenomenal success. The faculty then published the class process in the Journal of Engineering Technology, the leading journal in Engineering Technology and Industrial Distribution, as an example of how powerful industry-supported teaching could be. The class went on to win honorable mention in the Decision Sciences Institute’s Innovative Teaching Competition and was published in five other journals. TTI had proven that an industry-driven curriculum could deliver outstanding academic results.

Research-driven curriculum would lead to other innovations. Faculty introduced student projects into APICS (The Association for Operations Management) contests, and ID students cleaned up. One paper written by a student group went on to win the APICS international competition. ID was making waves in uncharted territory.

Electronics Distribution Enters the Scene

The Industrial Distribution Program had been founded by electrical distributors. An electrical distributor works in Maintenance Repair and Operations (MRO) but also serves contractors. The ID Program is perhaps best defined by the distributors’ customers who determine what the distributor must do to be successful. The primary employers and research partners for the program either serve Original Equipment Manufacturers (OEMs) for raw materials, MRO for plant maintenance, or serve contractors, often building facilities, the distributor will later support through MRO. Electrical distributors serve two of these sets of customers, and the program was largely tailored to their needs. Electrical distributors needed employees who understood the technology and services needed to support these customers. (Electrical Distributors deal a great deal with OEMs as well.)

MRO requires an understanding of how manufacturers repair and replenish products for their operational needs. Orders are frequently small and sometimes time critical. For standard replenishment of coolant, for example, the distributor may have a few days to respond. For a “machine down” due to a motor failure in a manufacturing line, the shutdown may cost hundreds of thousands of dollars per hour. An MRO distributor has to be very flexible.

Contractors tend to plan for the next day or next couple of days depending on what just happened today. When a contractor places an order, they would like to have it today or tomorrow at the latest. This short lead time requires having the right inventory when the contractor calls. Trouble is, the contractor could be asking for any of tens of thousands of different

One paper written by a student group went on to win the APICS international competition. ID was making waves in uncharted territory.
Paul Andrews had started the process of hiring ID students and working with the ID Program under Dr. Rice’s leadership. He supported the program by becoming one of the largest employers in the program’s history, sending many employees through the Read Center’s continuing education programs, through generous gifts that founded the Paul and Judy Andrews Center at Rudder Tower, and by establishing excellence funds to support faculty and staff enhancement.

In 1997, Craig Conrad, a vice president with TTI, came to Texas A&M to discuss the program’s future with Dr. Jennings. Craig then proceeded to join the Industry Advisory Board and coordinate the program’s relationship with TTI. Craig also held leadership positions, eventually becoming president of the National Electronics Distributor Association (NEDA). Craig suggested to his colleagues at NEDA that the industry could benefit from a stronger relationship with academia. He recommended that NEDA become involved with Industrial Distribution Programs.

Robin Gray, Executive Vice President for NEDA, joined the Industry Advisory Board at Texas A&M and worked with Craig and other electronics firms like Avnet and Arrow to establish and fund an Electronics Distribution Track. The track was an overnight success, instantly catapulting electronics distributors to the forefront of ID Program recruiters.

Research Slips into Overdrive

In the late 1990s, the dot com frenzy was intense. While contractor-serving distributors were not worried, everyone else was very concerned. Distributors were beginning to sense that the dot coms would fail, but if the process dragged on too long, considerable damage could be done to supply chain relationships. The ID Program formed a consortium (described in the introduction) to investigate the issue. When the researchers proved disintermediation was a myth, the questions were: “Why did this happen?” “Could it happen again?” and “What should distributors do to address the underlying problem?” The researchers had three reasons the dot coms failed:

- The need for engineering knowledge and a strong understanding of distribution processes has made electronics distributors a perfect match for the ID Program. Items. The contractor-serving distributor has to be very agile.

OEM, on the other hand, is usually planned further in advance so the distributor can plan better as well. The problem is the environment is extremely competitive and products often have high obsolescence rates, as in high tech environments. Engineers design new products and the distributor has to use a great deal of expertise in helping customers build products that the supply chain can support. The OEM distributor has to be very precise.

Electronics distributors principally fall into the last category. They serve large manufacturers and have to assist in product design and Bill of Materials management. Logistics has to be precise since waste is not tolerated by customers or suppliers. The need for engineering knowledge and a strong understanding of distribution processes has made electronics distributors a perfect match for the ID Program.
1. The technology was not ready. High speed Internet solutions needed clean data and consistent processes. Neither existed, and it would take years to create them.

2. The complexity of distributor activities had been greatly understated and automating them would take far longer than had been originally estimated.

3. In order to run customer relationships (the dot com goal), one needs the complete history and support of those who created the relationships (distributors). Distributors had no intention of giving this support to their would be destroyers.

In short, the dot coms never had a chance. So was it all just a bad idea? Not really, because what the dot coms envisioned (information automation) was not only possible but inevitable when the technology was ready and distributor processes were better understood. So, it could happen again. The researchers saw this outcome as unlikely, though.

Instead, they believed that distributors would take control of information automation and use it to dominate supply chains like never before. The researchers viewed distributors as relationship managers between customers and suppliers with inventory only a byproduct of information failures (poor forecasting and inaccurate supplier lead time estimates). Relationships are very complex information exchanges where past knowledge of a partner’s behavior and performance is combined with other complex pieces of information to form the all important ingredient to a successful partnership: trust. The researchers believed distributors would automate the simpler aspects of information management and focus on becoming more effective in the higher orders of relationship management. When they did, the research team believed they would become more successful than ever imagined.

The Information Systems Consortium was the first step in establishing the value of distribution. Next came a distributor backlash against the dot coms to finish them for good. Disintermediation was down and electronics distributors, for one, wanted to deliver the killing blow. Electronics channels had been under more attack than most, and conflict between customers and suppliers had led many to question the value distributors provided to the supply chain.

NEDA launched a study to specifically identify and quantify the value distributors bring to the supply chain. The Read Center was awarded the project. ID faculty and researchers built a “value calculator” and then applied it to many supplier-distributor and distributor-customer relationships. The study produced stunning results. For different scenarios, the study found that the value distributors brought to supply chain partners ranged between 10% and 60%. Since electronic distributors ran gross margins of less than 20%, the value was obvious, and disintermediation was easy to dismiss.

Some Results from the Value Calculator

The Read Center’s research was expanding and having an increasingly important impact on the industry. The research was increasing the understanding of distributors in general, and for ID students in particular, through adding the findings to the curriculum. The ID faculty published books from the research findings and then introduced those books into the Read Center undergraduate and professional development courses as part of the curriculum. The research was being published in new journals like the Review of the Electronic and Industrial Distribution Industries created by NEDA and distributed to business leaders and academics alike.
Program Developments

The Industrial Distribution Program increased its status as an academic program in the College of Engineering during the late 1990s and early 2000s. The Department of Engineering Technology was renamed the Department of Engineering Technology and Industrial Distribution in recognition of the program’s stature.

Despite distance education having been well-known for some time, at major universities like Texas A&M the concept was still somewhat revolutionary. The MID has enjoyed great success becoming the premier graduate program in Industrial Distribution. Its status has been greatly enhanced by its students with business owners, CEOs, vice presidents, and directors having attended the program and/or promoted to such roles after graduation. The MID then added to the curriculum the first international class in Global Distribution, further expanding the global reach of the ID Program. Classes were conducted in Mexico (Guadalajara), China (Shanghai), France (Paris), Germany (Munich), and Italy (Rome) with plans to return to China (Beijing) in 2009.

MID students continue to play a significant role in the ID Program upon graduation. MID students have funded research projects through their firms, served on the Industry Advisory Board, and given generous grants and endowments to the Program. Bob Borsh, owner of the House of Forgings, established the first endowment for the MID. He named the endowment in honor of Dr. Daniel Jennings, Program Director for MID. The endowment served as the first gift-based funding for the MID Program.

When Dr. Jennings first became Program Coordinator, he was approached by two former students working for Rockwell Automation—Lawrence Piercy and Brian Roy. They told Dr. Jennings that the Automation Laboratory needed an upgrade. Rockwell now owned the Allen Bradley brand, a very successful industrial automation company. J. R. Thompson was an Allen Bradley distributor, and when Rockwell bought Allen Bradley, Rockwell became a partner of the ID Program. Rockwell and Allen Bradley were already responsible for creating the Andrew Rader and Allen Bradley professorships held by various faculty in the Department.

Dr. Jennings then set out to develop a Masters in Industrial Distribution (MID). The MID was a major undertaking since it would create not only a new graduate program for Texas A&M but the first Industrial Distribution Masters program in existence. The ID faculty felt the program’s success was dependent on its flexibility since its students would have to keep their jobs and would, more than likely, travel extensively. The MID would be targeted toward professionals. The faculty decided to offer the MID as a distance-based program. Even though distance education had been well-known for some time, at major universities like Texas A&M the concept was still somewhat revolutionary.

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Dr. Jennings asked ID and Engineering Technology faculty to work with Mr. Piercy and Mr. Roy to create a “world class automation laboratory.” Dr. Jennings also asked Jim Williams, an Aggie Mechanical Engineering grad and a vice president of Rockwell Automation to
assist in securing an endowment for the automation lab. Jim worked very hard in securing the necessary funds from Rockwell Automation and the Allen Bradley Foundation. The Dean of the College of Engineering and Texas A&M Foundation held a grand opening for the laboratory in fall of 2000. Rockwell donated funds and equipment and built special teaching units uniquely designed for Texas A&M. The long term relationship between Rockwell, Allen Bradley distributors, and Industrial Distribution students, has been tremendously strengthened by the world class education the lab supports. The lab was an overnight sensation and remains a showpiece for the Department.

A long term supporter for the ID Program, Mr. Leonard Bruce, met with the Texas A&M Foundation and Dr. Jennings in 2000 to discuss giving a gift to create an endowed chair for the Industrial Distribution Program. The Leonard and Valerie Bruce Chair was created from their generous gift. The Chair is connected to the Program Director (renamed from Program Coordinator in recognition of the responsibilities entailed) position and intended to support excellence in the Program’s development. It was the first endowed Chair created for the Industrial Distribution Program.

In 1999, Dr. Jennings and Brian Reynolds, Associate Director of the Read Center, developed a new professional development program that would become the center’s new flagship. The Certificate in Distribution Management (CDM) was targeted at Branch Managers and high potential candidates and had been requested years before by industry. The CDM was an instant success and brought the Read Center back to prominence in Professional Development (continuing education).

The CDM consists of three modules focused on key roles for a branch manager: Sales Management, Profitability, and Inventory. The program is delivered by the Industrial Distribution faculty and is highly respected by industry. The CDM started strong and was growing fast when tragedy struck the University first, then the entire country.

**Tragedy, Struggle, and New Opportunities**

As 2000 came to a close, the Program was trying to absorb the many great opportunities and the horrendous Bonfire tragedy. PAID was setting records at Career Fair and the Holiday Banquet. Still, sadness had settled over the University and more was to come. September 11, 2001, shook the world, markets collapsed, the dot com bubble burst, and Aggies again prepared for war. The ID Program struggled to maintain opportunities for its students. Faculty called on companies asking them to stay close to the program and not cancel internships and other activities they would need once the recession was over.

PAID’s 2002 Career Fair took a slight dip, but the organization came through. Research projects shrank throughout 2002 but started recovering in 2003. The CDM and other Professional Development programs took a drop as well prompting Dr. Ben Zoghi, who became Program Coordinator in 2001, to pursue new program strategies. He introduced new programs and aggressively pursued new corporate relationships. He also turned to faculty to create new programs and sell existing ones. Slowly, the Read Center Professional Development programs started to recover.
As Dr. Zoghi pursued new opportunities, Dr. Barry Lawrence took the research success to date with large and small firms, the Information Systems Consortium, and the NEDA Value Study to form the Supply Chain Systems Laboratory (SCSL). The economy was recovering on the back of the construction industry, and the groundbreaking research the Program had performed with Master Halco (a fence manufacturing and distribution firm) was proving very valuable to Building Materials Distributors. With the assistance of IBM (a Consortium leader), the knowledge from Master Halco projects, and the understanding of Distribution Value from the NEDA study, Dr. Lawrence took a team of high powered researchers who had brought these projects to great success and created the SCSL. The Dean of the College of Engineering presided over the grand opening of the SCSL in 2003.

The SCSL not only supported research but also served as a technology provider for the IDIS 344 class redesigned by Dr. Lawrence, at Dr. Zoghi’s suggestion, into a Supply Chain Information Management class. The lab combined research with education in a mutually supportive environment. Researchers found themselves moving from research projects to class curriculum seamlessly. The process led to research information being introduced to ID students in real time. IDIS 344 was the first class to introduce Enterprise Resource Planning (ERP) systems to students at Texas A&M thanks to generous software gifts from Prelude Systems (now part of Activant), Eclipse (now part of Activant), and PeopleSoft/Oracle. The backbone of the technology, though, came from servers given to the lab from IBM valued at over $1 million. The mission of the SCSL is as follows:

“The Supply Chain Systems Laboratory (SCSL) is a Texas A&M Industrial Distribution Program laboratory designed to educate our students, create cutting edge solutions for wholesale and industrial distribution channels, and provide answers to Distribution and Supply Chain Management (SCM) Challenges. The SCSL brings together members of vertical channels and information technology systems providers to test, demonstrate, and create new methods for members of industrial channels. The laboratory is unique in the United States, in combining education, research, and professional development. The lab represents another giant step in ensuring that our students continue to receive a relevant, cutting edge industrial distribution and technology education, and that our industry partners reap the benefits by solving current and significant “real world” problems.

The primary mission of the lab is to provide students and distribution industry professionals with cutting edge supply chain information technology education and train them for tomorrow’s global business challenges. The lab provides supply chain technology education to students in the Industrial Distribution Program at Texas A&M University. The lab trains the students with hands-on-experience and problem solving exercises in industrial application software.”

From the Supply Chain Systems Laboratory website: http://supplychain.tamu.edu/about/
The educational mission of the lab is to support ID courses, like IDIS 344, and other educational institutions all over the world. The research mission is the creation of information for delivery to students the world over. From 2003 to 2006, the SCSL doubled its research every year. As research exploded, the faculty’s reach and understanding did as well. New relationships were built with large and small firms in locations all over North America.

SCSL Research Partners

As the recession fears eased and distribution firms grew rapidly, PAID grew continually stronger, and the job market recovered for ID students well ahead of other programs. Another significant player was emerging: the energy industry. Oil prices were rising rapidly in response to increased demand from growing economies in Asia, most notably China and India. The energy industry had gone through many cycles and had become very conservative in their hiring practices during the 1980s. The result was a massive hole in middle management positions that would soon lead to a shortage in leadership.

The Human Resources Crisis

In 2005, Dr. Lawrence became Program Director as the country came out of recession and opportunities started to flood in. The Baby Boomers were expected to start retiring in large numbers, and the new graduating seniors were going to be vastly outnumbered by retiring workers if the estimates were correct. In addition, the problem was more concentrated in knowledge workers. The information revolution was making higher education a requirement for knowledge workers, and so the greatest crunch was going to hit college graduates. Many firms began ramping up their recruiting in front of the shortage and the job market for ID students quickly tightened. The energy industry was one of the most aggressive due to the proximity of Houston and the perfect fit with the ID curriculum.

Energy firms engaged with the program at every level. Wilson Supply’s CEO John Kennedy joined the Industry Advisory Board and the firm proceeded to fund significant research studies. Large oil companies began funding undergraduate activities and new research partners like Baker Hughes and Smith Services engaged in projects.
The faculty had recognized for some time the impact of globalization on distribution and now increased the focus on student problem solving skills. The Human Resources crisis was affecting more than interest in undergraduates. The Masters Program started attracting attention for developing the next generation of industry leaders. Many firms contacted the ID faculty to find more senior people and started recruiting the Masters students. Professional Development courses were also expanding as companies saw the need to develop their current people rather than relying exclusively on new hires.

The Masters program was focused on developing future CEOs. The faculty had recognized for some time the impact of globalization on distribution and now increased the focus on student problem solving skills. MID students had always done multiple projects on their own firms based on the information gained in classes and their own research. The faculty merged research projects conducted by the Supply Chain Systems Laboratory researchers with graduate student projects. Students were taken through a research project in a single week during one of the Residency Weeks and trained to conduct a year long project for their firm in their capstone course.

The Information Systems Consortium, after creating the Supply Chain System Laboratory, moved to its next topic: Distributor Information Management Best Practices. Four Enterprise Resource Planning (ERP) companies: Oracle, Prelude Systems, Intuit Eclipse, and Dimasys sponsored the study. The study documented processes at that time. Oracle next asked that a study be conducted at a worldwide level and the program worked with San Gobain, Wolseley, and other distributors, to establish global best practice processes. The study has been published in the Review of the Electronics and Industrial Distribution Industries. The Program was developing a reputation as a center for distribution knowledge that would impact all aspects of the Program.

50 Years of Excellence

At the end of the 2006–2007 academic year, the Industrial Distribution Program celebrated its 50th anniversary. The Program had enjoyed great success.
and graduated thousands of business leaders in the distribution community. More than 800 people attended the 50th anniversary celebration. The celebration was a gala occasion with tours, parties and a football game before the big anniversary party planned and executed by Industrial Distribution staff. PAID organized a banquet and both golf tournaments at golf courses in College Station. The event combined dedicated work by ID Staff, PAID officers, and team leaders, working tirelessly to put the event together.

The event was attended by the Industrial Distribution Industry Advisory Board (IAB), which held its meeting during the festivities. The IAB had grown in significance over the years and now was composed of company owners, presidents, vice presidents, and directors. The IAB assisted the Program in setting direction and vision and in development. Over the years, the Board had played a key role in the Leonard and Valerie Bruce Chair, the foundation of the Rockwell Laboratory, significant research projects, and the Bosch Rexroth – R. C. Womack Laboratory whose grand opening had just preceded the 50th celebration.

Mr. R. C. Womack gave a generous endowment to establish a world-class hydraulics laboratory at Texas A&M University. The lab was further given cutting edge equipment by the Bosch Rexroth Group to build an unparalleled facility for undergraduate education.

The grand opening hosted Mr. Womack; Mike Rowlett, Chairman and CEO of Womack Machine Supply; Manfred Grundke, CEO of Bosch Rexroth; and Dr. Clint Bertrand. Mr. Womack presented Dr. Bertrand with a letter he had written to Mr. Womack 40 years before suggesting that a Hydraulics Lab was soon to open at Texas A&M University due to Mr. Womack’s efforts. That lab was a solid teaching tool for our students but was now being replaced with one that would attract attention the world over. Dr. Bertrand’s nearly 50 years of service had supported our students with labs essential to their education and to see him and Mr. Womack shake hands over this latest achievement was a wonderful moment.

Laboratory, significant research projects, and the Bosch Rexroth – R. C. Womack Laboratory whose grand opening had just preceded the 50th celebration.

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As the next decade began, the Program saw some supporters doing very well and others in decline. While the energy industry was booming, the building materials distributors were suffering from a tremendous decline driven from overbuilding while interest rates were low. The industry looked poised for a comeback in the coming years, however. In fact, the Industrial Distribution Program and all of its supporters seemed positioned for a very strong and extended run.

**Curriculum Gets a New Look**

To continue its success, the Program was pursuing new initiatives for Undergraduate, Graduate, Research, and Development. Sigma Delta was charged with managing the Program’s relationships with Industrial Associations. Sigma Delta students attended conferences to represent the Program and educate the community on its students and other offerings.

The faculty began studying the curriculum to ensure it would remain current and relevant. Globalization was sweeping the distribution community as customers and suppliers moved overseas and customers asked their distributors to follow. Global issues included extended supply chains, international sourcing, and foreign facilities. ID Program supporters needed recruits with a global perspective.

The Program first responded with the Global Distribution class in the Masters of Industrial Distribution. This class increased faculty knowledge on global operations that soon found its way into research projects as well. In 2007, the ID faculty began in earnest to investigate creating a Global Distribution class for the Undergraduate Program. The faculty, with support from the Dean’s office, began working with Healthcare Distributors to establish curriculum in the fast growing medical field. The Dean’s office gave the Program considerable support in 2007/2008. Three new tenure track faculty positions were given to the program increasing the size of the permanent faculty by 60% in one year!
The Masters of Industrial Distribution grew stronger in 2008. The MID started its own Advisory Board in May of 2008. The Board was charged with assisting the MID in recruitment, research directions, and development. The MID Advisory Board, at its first meeting, worked on redesigning the capstone research class. The Board also discussed new ways to execute the Global class. Future meetings would include development needs and recruiting efforts.

New Research Directions

Faculty research continued to grow through 2007 and 2008. Inventory projects continued at a rapid pace with new processes being introduced. Network Optimization was also growing rapidly in response to distributor consolidation. Distributors were being acquired at a rapid rate. Acquisitions lead to redundant inventories, facilities, and many other assets. The opportunity to increase profitability through such studies was very appealing.

Other actions were driving research efforts as well. Lean principles were impacting distribution as customers and suppliers continued their own programs. Distributors started projects to implement lean initiatives for internal improvement and to better understand customer and supplier actions. Lean promised many research opportunities for the ID Program.

The Supply Chain Systems Laboratory (SCSL) focused on a new consortium. Distributors were struggling with and asking for solutions to pricing problems. While projects to control the cost of services (inventory, network optimization, etc.) were critical, distributors were certain that they needed to address pricing issues. Pricing was too complex an issue for a single research project, however. The Supply Chain Systems Laboratory started a consortium to study Pricing Optimization. The consortium would seek optimal solutions to pricing and then create practical tools that could be used in sales negotiations, contracts, and price lists. The consortium was one of the most successful research projects the SCSL had ever conducted.

A popular concept to come out of the Pricing Consortium was the concept of customer stratification.
Inventory stratification had been the most successful project topic to date, and customer stratification filled another piece of the puzzle in understanding customer-distributor relationships. The researchers quickly recognized that the long held belief that distributors were primarily relationship managers should be further explored in the research. Inventory management was a bridge between customer and supplier needs and capability. This revelation led the researchers to explore how relationships and profitability were linked.

**Customer Stratification**

The next consortium founded in October of 2007 was called Optimizing Distributor Profitability and focused on creating the perfect distributor by enabling the most relevant and profitable best practices. The intent was to find out what optimal profitability and Return on Investment really was for distributors. The consortium was completed in May 2008 with education classes to follow.

In 2008, the faculty felt that the research program was maturing and was respected nationally and internationally. The research was shifting its focus beyond issues based on an individual firm (very valuable for curriculum development) to one that served the broader regional, national, and international Industrial Distribution community through consortiums and other new mechanisms.

The ID faculty now wanted to drive research that would serve the state of Texas and the broader region. The Vice President of Research for Texas A&M, and the Dean's Office of the College of Engineering, asked...
The concept led to the creation of the Mexico-Texas Corridor study on Global Supply Chain Throughput and would include manufacturers, distributors, city and state entities, and development organizations in South Texas and Central Mexico. The ID faculty believed the potential business improvements would boost the Texas economy and, therefore, all our business partners in the state. If such a boom were to take place, it seemed likely that ID students would be working for Texas firms selling into Mexico.

The Global focus would grow to include many projects overseas with a special emphasis on the spectacular growth in Asia, but there still remained a research “hole” in basic distribution theory. Sales and Marketing included the greatest strengths and weaknesses for most distributors. The next consortium, planned for January 2009, would be focused on the complexities associated with optimizing the roles and efforts of the sales force and blending those with powerful marketing approaches.

The ID faculty believed the potential business improvements would boost the Texas economy.

The Engineering Technology and Industrial Distribution Department to establish an office in Monterrey, Mexico that would assist in Technology Transfer to the region and bring Supply Chain solutions to both sides of the border. The ID faculty examined issues in trade and decided a major problem existed in the speed with which goods could be delivered in the region. This “throughput” problem was damaging trade and putting at risk the opportunity for a major manufacturing boom on both sides of the border.
The concept led to the creation of the Mexico-Texas Corridor study on Global Supply Chain Throughput.
The ID Program was created to serve industry, grew through the support of industry, and will serve that industry with education and research to make it stronger.

Professional Development and Industry Outreach

The Certificate of Distribution Management continued as the leading professional development program in 2008. New programs like the Professional Sales program were in high demand along with other new programs. The Read Center started to offer Excellence Programs designed to teach firms how to transform processes with their own people. Programs like Pricing Optimization were designed directly out of the research consortiums.

The Future

The ID Program begins its next fifty years as it ended its last. The Program was created to serve industry, grew through the support of industry, and would serve that industry with education and research to make it stronger. The relationship between industry and the ID Program has and will continue to define its role.