

## ***Cyrus McCormick: A Legitimate Marketing Genius***

by Dr. Peter Reid Dickson, Florida International University  
Limited editorial revision, Hugh Sloan

The making and marketing of the mechanical reaper is one of the great triumphs of modern civilization. Up until the 1850s crops were harvested by hand, the same way that they were harvested 4,000 years earlier as depicted in the beautiful and detailed drawings on the walls of Egyptian tombs. It also transformed the United States into the Superpower of the later part of the millennium.

Cyrus Hall McCormick grew up on his father's farm of 1,800 acres at Walnut Grove, in the Shenandoah Valley of Virginia. His father Robert had spent many years trying to improve basic farm equipment such as the plow and trying to invent a horse drawn reaper to replace the hand held scythe that can be seen being used in the tomb paintings of ancient Egypt (4,000 years ago). A reaper harvests crops such as wheat. In fact, Robert passed on his invention, that was still not robust enough to handle the working conditions (the roughness of the paddocks), to his son Cyrus in the late 1820s and allowed him to take all of the credit - no doubt Cyrus improved on it but the plain fact is that Cyrus McCormick was not a great inventor like Thomas Edison. He was a great marketer.

The 22 year old Cyrus was reported to have farm tested his latest version of the reaper in 1831 and 1832 (not entirely successfully) but he did not take out a patent until 1834 when he heard that another inventor, H.F. Mann, had developed a very similar machine and was promoting it in New York. McCormick was not able to renew his patent and extend it in the late 1840s because a number of people disputed the primacy of his first patent. However, even by then Cyrus recognized that his success would not come from patent protection but from his mass manufacturing and marketing efforts. By 1850 there were some 30 reaper firms that were imitating-innovating his reaper but most were not much more than extended blacksmith/foundry works making one a week. In fact, in the 1840s McCormick had his reaper made, under license by a number of small businesses, in Wisconsin, Iowa, Missouri, Illinois, Michigan, Tennessee, and Ohio. Several of these licensees such as Seymour and Morgan, Mann and the Fountain Brothers became competitors by adding their own improvements.

McCormick and Sons made very few reapers in their farm foundry from 1833 to 1840 - instead they focused on an iron smelting business that went belly up and Cyrus was bankrupt in 1837. The following sales were made:

<u>Year</u>	<u>Reapers Sold</u>
1841	2
1842	7
1843	29
1844	50
1845	50 this amounts to a pretty slow start!

Over these years he improved the design, but McCormick raged at the damage done to his reputation (not to speak of the farmers' crops) by some licensee's slipshod manufacturing (they made an additional 50 or so reapers to his design specifications) and he decided the only way to maintain and improve the quality of his machine was not to renew existing licensee agreements (which created many small competitors) and to make them all himself. He first set up a proper manufacturing operation in Cincinnati in 1845, a

business owned by a Mr. Brown and run by his brother Leander McCormick (to make, sell and service a maximum of 500 reapers). In 1846 he set up a similar operation in New York. Still unhappy with the manufacturing quality he moved to Chicago where in 1848 he made 500 of the 778 McCormick reapers built that year. In 1849 1,500 were built in his manufacturing plant, in 1856 4,000. He had set up one of the first mass production manufacturing plants of standardized parts in the world, ideally positioned on the river and lake front, East of Massachusetts Avenue with barges and sailboats able to load on one side of the plant and a railway line on the other. The lathes, grinders and saws in his plant were driven by one of the first large steam engines in Chicago. In 1859 his brother William wrote to him saying, "Your money has been made not out of your patents but by making and selling the machines."<sup>1</sup> He had the genius to invent the modern business (but see Alfred D. Chandler, Jr. in readings list).

The following quote from his grandson, published in 1931, seems particularly modern: "He preached quality to the factory men until it was engraved on their hearts. In modern parlance, he 'sold' them quality so well they understood the necessity for it and therefore believed in it. Each year the McCormick reaper became heavier, stronger, better: each year it gained more favor with the farmers. My father has told me how he used to hear his father say, 'I don't want to make my entire profit from a single sale - I want to make the machines so good that the farmer and his sons will come back again and again to buy more McCormick machines.'"<sup>2</sup> Note the stress on customer orientation, instilling quality into the factory, the continuous improvement effort, and the objective of building customer satisfaction and long-term brand loyalty. If this sounds too good to be true then it should also be recognized that it took Cyrus from 1831 to 1842 before he began to be really satisfied with his reaper, and in that year he took the extraordinarily bold step of offering an absolute guaranty of satisfactory performance or the *return of your money*. Such a guaranty was unheard of for any product let alone the most expensive farm implement you could buy (\$50 in 1833, \$125 by 1853). The gearing on the 1853 reapers was defective and it was replaced, free of cost to all purchasers (BUT who themselves still had to do the labor).

### ***McCormick's Environment Insights***

Recognize the importance of market environment analysis by careful consideration of what Cyrus McCormick saw (his vision) that his competitors did not see:

#### **McCORMICK'S ENVIRONMENT INSIGHTS**

1. He understood that *manufacturing and marketing effort* was as important as product invention, even more important. He did buy out other patented feature improvements but he and no-one else could buy the manufacturing and marketing operation he created.
2. He early on recognized that the huge market for the reaper was *in the West, and not the East*, so he set up in Chicago, at a time when there were still wolves in its suburbs. This gave him a huge location advantage over his major eastern competitors.
3. He understood *not only where the market was but the needs of the market* - that the farmer would need fast delivery and excellent after-sales service. After all, the farmer's crop and livelihood was at stake. Timing in harvesting is very important, any delay, past ripening, exposed the crop to loss from weather, insects or birds.

---

<sup>1</sup> Cyrus McCormick, *The Century of the Reaper*, Boston: Houghton Mifflin, Company, 1931, 35.

<sup>2</sup> McCormick 1931 *ibid*, 43.

4. He understood the *opportunity presented by the Civil War* (a political event). The manpower shortage on the farm encouraged the use of labor saving technology and the huge armies greatly increased the national demand for buying grain (as opposed to production for own consumption or local consumption). McCormick supplied both sides - the South on the sly. As an aside, in his later years McCormick tried to enter politics but like Henry Ford his political views were much less popular than his products. The point is he used public policy to his advantage.
5. He understood the *opportunity created by the new popular press* to communicate with farmers who had just become literate.
6. He understood *how to use the railway, the new distribution technology*, very effectively.
7. He saw how to *use the local merchants as sub-agents to both sell, service and collect debts* from farmers that they knew.
8. He understood the importance of having *quality manufacturing management* and hired his brother to run the operation. As an aside his factory burned down in 1851 and 1871 which in the end was fortuitous because it allowed improvements in production processes and increases in capacity (parallel with Japan and Germany in post WWII setting).
9. He understood the *importance of having a highly respected business partner (William Ogden, the undisputed first citizen of Chicago)* as an early partner to open doors to cheap financing and deal with local regulations and politics. He also understood the importance of having Ogden as a *silent or sleeping partner who would stay out of the day to day running of the business* and hence not create debilitating internal fights over reinvestments and strategy.

Each of the above insights are examples of the importance of understanding the consumer, the competition, distribution channels and facilitators, public policy and one's own company strengths and weaknesses, all covered.

### ***McCormick's Marketing Management***

The following are some of the further *marketing innovations* that Cyrus introduced:

#### ***Product Quality***

The product was shipped only partly assembled (an early example of postponing assembly to save freight costs and reduce manufacturing costs). The farmer had to attach the wheels, and other parts, and also adjust the settings of the machine. Not only were excellent written assembly instructions provided, but the parts were painted with numbers on them to help assembly and later with simple directions on how to adjust settings (such as indicating with an arrow which way to turn or move a bolt in a slot). Cyrus recognized that quality performance and durability depended on how well the farmer assembled the reaper, set it and maintained it.

Why does providing clear assembly and operating instructions in a pamphlet and on the machine offer such a major strategic advantage? What at first may seem like a small tactic can emerge as a very smart competitive strategy.

Aside: What is a competitive strategy? A tactic that really works! What is a marketing tactic? A strategy that did not! [A little bit of cynicism directed at the after-the-fact way many firms, and we as teachers, differentiate a strategy from a tactic.]

Consider: The better the instructions, the better the training of the user, the better the performance, the higher the satisfaction, the higher the goodwill for word-of-mouth and future buying loyalty. The need to train the farmer was evident when factory experts sent out to help the agents in the early years (in itself a sensible way of teaching the factory engineers about customer behavior) discovered that many farmers *left their reapers out in the fields through the winter* and gave them no attention until the last frantic moment before harvest. The result was that often crops were ruined by weather or pests because of a rusted bolt or because the poorly set and maintained reaper was badly damaged in its next use. Many of today's VCR, PC, and software manufacturers could take a lesson from McCormick about the value of *quality instructions* in creating a skilled user, which in turn creates the reality and image of a higher performing and higher quality product.

### *Repairs and Maintenance*

McCormick developed standardized parts, such as wheels, which were used on several of his pieces of equipment. Why this was a big competitive advantage? It enabled the farmer to cannibalize his other equipment in an emergency (provided he had also purchased other McCormick farm implements), reduce the parts inventory of his local dealers, and greatly reduce the cost of manufacturing and parts supply.

### *Distribution and Selling*

In the early 1840s local agents were set up. Their contract required that they "... maintain a sample machine, canvass the wheat districts in their territory, deliver reapers and instruct buyers on their operation, stock spare parts, be prepared to do repair work and render field service, make reports, collect money due on notes, and distribute advertising. They often operated through sub-agents, country blacksmiths or general storekeepers."<sup>3</sup> Cyrus set up these agents in the early days but in 1845 he hired his cousin J.B. McCormick who covered Kentucky, Tennessee and Missouri, and in 1848 three traveling agents were appointed as territorial supervisors of the local agents. Why did the agent system work so very well? Because the local agents or sub-agents knew the local farmers, could assess their credit worthiness, and were guaranteed payment because the farmer depended on them for other essentials.

As the railways penetrated the Midwest, his traveling agents were first off the train setting up local agents and because the railways were primarily built to carry cattle to Chicago, this gave McCormick a major break. Why? Because many wagons were empty on the outbound trip, so rates to deliver farm equipment were low, especially at the volume deals that McCormick could negotiate with the railways. This was one of his big cost advantages over the competition. Earlier his machines were shipped by boat and barge around the canal system that flourished in Ohio, Pennsylvania and New York from 1830-1850. One of the reasons why it took 20 years for his business to start booming was that the transportation infrastructure that opened up the market was *not yet in place*.

---

<sup>3</sup> McCormick, *ibid*, 48

## *Advertising and Publicity Management*

Cyrus McCormick was also a *genuine pioneer of promotions and advertising*. From January 1833 to January 1835 the McCormicks placed 105 notices (free PR stories) and advertisements in the *Lexington Union*. Apparently they had a two year contract. But what is interesting is what was promoted:

<i>Insertions</i> <sup>4</sup>	
Hillside plows.....	53
Threshing Machine.....	36
Millwrights wanted.....	9
Mechanical Reaper.....	7

Clearly Cyrus and his father believed, at that time, more in their plows and threshing machines. According to one historian this advertising "campaign" that built the reputation of the McCormicks was the *first of its kind in American economic history*. Several examples of the Reaper ads that were used are attached. The advertising used a lot of testimonials which seemed quite genuine.

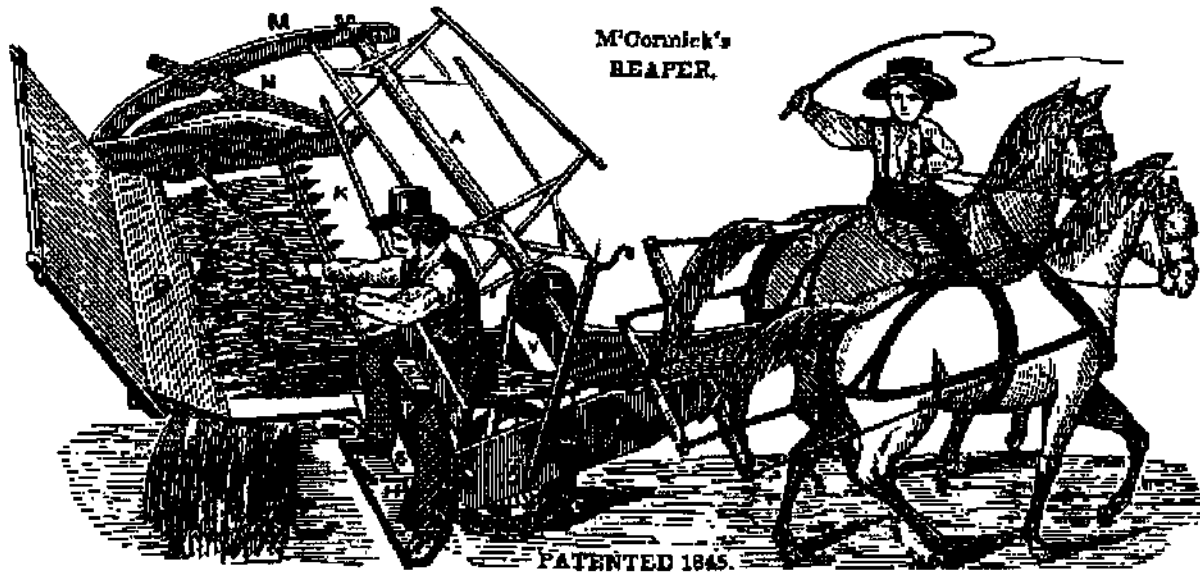
McCormick's use of display advertising first came when he used illustrations in handbills passed out to farmers by local agents in the 1840s. What is interesting about the ad? Note the puffery used in the peripheral cues: the horses are sleek, groomed and almost prancing, the man raking the straw is dressed in a top hat and his Sunday best! Later advertising plays on the tremendous popularity of the equipment - again using the opinions and behavior of others to encourage laggards to buy. Why Sunday best?

His early advertising campaign (1832-34) was picked up and given free publicity by the *Farmer's Register*, of Richmond Virginia, the *New York Farmer* and the *Mechanics Magazine* of New York. Later McCormick developed his own magazine *Farmers Advanced* that reprinted the latest recommendations for crop rotation, fertilizing, weed and insect control, and the use of hybrid seeds from the Agricultural Colleges and Stations created by the U.S. Agriculture Service and the Land Grant Universities. All of this very useful advice to his past customers was very valuable and *it cost McCormick nothing* to fill its pages. He also created features where farmers wrote in with their own recommendations and advice as to how to improve farming processes. These columns were very popular. Of course liberally sprinkled throughout the magazine were *articles on new McCormick farm machinery, order forms and advertising of other products*. At one time the circulation of this magazine was in the hundreds of thousands.

As far as promotion was concerned, McCormick had no rivals in his early days. He encouraged field demonstrations on respected local farmers' properties *after church on Sunday*. The womenfolk came along to gossip and to see what their husbands intended to spend their limited resources on - the men watched and talked each other into buying the new equipment. Aid organizations still use a similar technique to encourage the diffusion of new farming techniques in third world countries and *much has been written about social influence in the diffusion of innovations in close knit communities decades after McCormick understood the theory and put it into practice* - tied synergistically to his public notices announcing the event and inviting challenges to a contest and afterward reporting the event with further testimonials from respected local farmers in attendance. Often his machines did not best his rivals in such contests but that mattered little. Why did it matter very little? Because his bravado in publicly challenging his rivals signaled his confidence in the superiority of his product, and only the attendees saw

<sup>4</sup> Norbet Lyons, *The McCormick Reaper Legend*, New York: Exposition Press, 1955, p. 117.

his equipment bested. The advertisements afterwards never told the full story. One of the first display ads that includes testimonials of satisfied users will be provided class, from: H.K. Davis Book and Job Office Print, Chicago 1849.



Close Up of "Top-Hat" Illustration Used in Patent Application and Display Ads:  
 Note it is different from 1849 Illustration: Reproduced with permission from Paul C. Johnson,  
*Farm Inventions in the Making of America*, Des Moines: Wallace-Homestead Book Company, 1976,  
 p. 47

The enormous output of McCormick Machines defies the mental grasp of man. If the machines we manufacture were to issue from the gate of our works, (with the largest output in the world) the spectator would see all throughout the working day a McCormick Machine emerging at full gallop every 40 seconds. The demand of the farmers in the past season of 1898 was for 189,763 McCormick Machines. This multiplying tremendous call of the farmers will result in our manufacturing and selling still larger numbers in one season by the end of the century. What is the cause of this unbridled demand? What is the reason of the everlasting popularity of McCormick Machines? Why are we forced to run our Works by night and by day up to the output of a machine every 40 seconds? The cause is plain. The answer is simple. It is The Building of the Best in the World. Almost seventy seasons of success have elapsed since Cyrus H. McCormick invented the Reaper in 1831. In all that time the McCormick has been the best Built Machine in the World. The McCormick Machines for 1899 are The Best in the World. The McCormick Right Hand Self-binding Harvester; the New 4 Mower 4 1/2 and 5 ft. cut; the Big 4 Mower 6 ft. and 7 ft. cut; the One Horse Mower, 3 1/2 and 4 ft. cut; the Folding Daisy, the Corn Harvester; the Corn Husker and Fodder Shredder and the Hand and Self-dump Hay Rakes 8 ft., 10 ft. and 12 ft. are The Best in the World. All these eight machines are McCormick End of the Century machines; built with a surpassing of invention and finish in construction that sets a noble standard to all other agricultural machines on earth.



Nov 19 1898

A creative display advertisement from the turn of the Century: Some Fast Machine!  
 Reproduced with permission from: *100 Years of Farm Journal*, Philadelphia, NY: Country side Press and Doubleday, 1976, 34.

McCormick knew his customers and he knew how to put a campaign together. Early on he used Agriculture Shows to display and demonstrate his new equipment and later took his machinery to international expositions in Europe where his inventions won awards. He did this to reinforce his reputation back home (Europe was still the leader in industrial inventions up until the turn of the century so awards from European organizations or Governments were more prestigious) and to start up his export sales which grew considerably from 1870 on. In fact, an extraordinary story is told of McCormick representatives making several trips to Russia in the 1890s to set up a manufacturing plant to make reapers and threshers to increase the farming productivity and returns from the huge Russian wheat harvest. However, the Czar was not a modernist and believed in the traditional agricultural ways that led to mass starvation only 10 years later, and the revolt that later led to the revolution. Who knows what the impact of early modernizing of the Russian farming economy might have had on Russia's political economy? What is not in dispute is that the early mechanization of American farming had a huge impact on the growth of the United States into a superpower.

### *Pricing*

McCormick was innovative in his pricing in several ways. First, he sold his early reapers at a price barely over cost. The idea was to get his product out in use rather than to make a quick killing (*penetration pricing* is what this tactic is called today). Second, he introduced a *standard* price. His competitors often haggled over price (as we still do with cars) but the problem with this is best characterized by telling a story of two neighbors who have just finished working in their fields with their McCormick harvesters and are swapping stories about what a godsend their reapers are, but one comes away from the conversation upset and bitter - no longer a word-of-mouth promoter of McCormick equipment. Why? Because he discovers that he paid more for his reaper than his neighbor and his neighbor rubbed it in. That is the disadvantage of charging what the market will bear at the individual level. It creates bad will in the haggling, and afterwards when buyers have discovered they paid too much. A new risky invention and brand cannot afford such bad will. McCormick created a competitive advantage for himself by standardizing the price early on. Third he introduced *term payment*, a very novel idea - in the early 1850s his reaper cost \$125. The farmer was asked to make a deposit of \$35 plus the freight from Chicago. The balance was due on December 1 (after the farmer had received payment for his harvest) with a 6% interest charge on the balance outstanding after July 1 of the *next* year. To get a sense of the investment the farmer was making a horse cost about \$20-\$30 at that time. In practice the farmer often only made a deposit as low as \$15 and the balance was collected by the local agent in the next 18 months. His credit losses varied from 3-5 percent, but his margin easily covered this acceptable risk. Extended credit required a huge amount of working capital, but the firm's internal earnings were able to not only support the growth in receivables, but after the 1871 Chicago fire McCormick was able to loan Marshall Field \$100,000 to start up his department store business again. Furthermore, McCormick's early growth and servicing of all of the Midwest and East reduced his risk exposure. If there was a drought or disaster in one part of the country that wiped out the farmers' revenue, then he could carry the farmers' debt in a way that a local farm supplier could not. Indeed, a story is told that Cyrus McCormick visited Webster City, Iowa, where all the crops had failed, looked around, shook hands with all the farmers who owed him money and *promised to see them through*, winning their loyalty forever.<sup>5</sup> Relationship marketing!

This all suggests that competitive marketing management is *not* a new innovation. Unfortunately, this all has an eventual sad ending. In 1984 International Harvester, the company created by combining five firms including McCormick in 1902 (the time of the great business trusts) finally sold its farm equipment business.

---

<sup>5</sup> See McCormick, *ibid* 52.

In the late 1940s, International Harvester dominated the farm equipment business, with a 60% share of the domestic market. However, several decades of very bad management, such as conceding far too much to unions for no improvements in productivity, getting into businesses such as marketing refrigerators, and paying out 90% of earnings in dividends to shareholders rather than reinvesting more in the company, simply *ran the company into the ground*. Some remnants exist today as Navistar, but the operative sayings seem rather to be about the IH product categories that “It runs like a *Deere*” or it is “Built like a *Mack* truck.” Faded glory, indeed!