

Food Fight: The Day McDonald's Blinked

Jack Greenberg, CEO and Chairman of McDonald's smiled as he walked to the podium to summarize the first quarter results for 2000. The market had already reacted that morning to McDonald's 12% increase in earnings, sending the stock up 8 percent. After almost no stock increase in 1999 and a 15% drop since the beginning of the year, Jack was happy to have some good news. More importantly, the \$180M investment in the Made for You cooking program was finally in place with significant improvements both in food quality and service speed.

After decades of spectacular growth, McDonald's had become an American icon and the world's most ubiquitous restaurant. Starting as a hot dog stand, the McDonald brothers' first restaurant had no play area, no happy meals, and didn't even serve hamburgers. Ray Kroc transformed that concept into a fast food machine, starting first with hamburgers and fries and then always changing with American tastes and culture. By 2000, more than 43 million people visited one of McDonald's 26,000 restaurants in 120 countries every single day. That translated to more than 15 billion customers a year with system-wide sales of over \$40 billion. Yet the previous ten years had been traumatic for McDonald's. In search of growth, the company had rushed from pizza and veggie burgers to popcorn and pasta. Massive campaigns to increase dinnertime sales with adult-targeted sandwiches like the Arch Deluxe were utter flops. And while McDonald's was the clear market leader with 42% of the fast food burger share, competitors like Wendy's had steadily nibbled at their core customers. Caught in the dot.com market excitement of 1999, little that McDonald's did caught Wall Street's attention. Even investments in food.com, a fast food delivery service, received nothing but yawns. To contain its archrival, Burger King, it had escalated the french fry and burger wars, enlisting help from Beanie Babies and Britney Spears. Not to be outdone, Burger King brought in Pokemon and the Backstreet Boys. This marketing race was so ubiquitous that many of the advertising slogans used by McDonald's and Burger King had become permanently imprinted on the minds of consumers. (Exhibit 1 lists advertising slogans used by the two restaurants.) Yet, no competition was as fierce as the constant race to deliver hot, value-priced food.

Although both McDonald's and Burger King debuted the same year (1954), by the dawn of the new millennium McDonald's was the undisputed hamburger king, at least in terms of sheer size. Burger King, by comparison, served nearly 15 million customers daily. Burger King Corporation and its franchisees operated over 11,000 restaurants in the U.S. and 57 countries and international territories around the world, producing 2000 systemwide sales of about \$11 billion.

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While both companies sold burgers and fries, their nearly 50-year battle had been waged around two competing concepts. McDonald's aimed to be the world's best quick service restaurant experience. Being the best meant providing outstanding quality, service, cleanliness and value. Burger King based its strategy around customer satisfaction through flexibility. Since the company's founding in Miami, the Burger King brand had become recognized for its flame-broiled taste and Have it Your Way food customization.

West Lebanon

With a combined total of nearly 37,000 restaurants worldwide, fast-food aficionados didn't have to travel far to find a Burger King or a McDonald's restaurant. Most communities, such as West Lebanon, New Hampshire, boasted at least one of each.

West Lebanon was a small city of just under 13,000 in the western part of the state, just across the river from Vermont. The community's Main Street still held a relatively healthy share of retail stores and commercial space, but the construction of one of New Hampshire's two major interstates half a mile away had siphoned off most growth since the early 1970s and channeled it into a series of strip mall developments. The stores and restaurants lining the strip counted on a year-round influx of consumers from nearby Vermont and seasonal tourists interested in New Hampshire's tax-free shopping opportunities. Weary shoppers who wanted a chance to stop and refuel could do so quickly and inexpensively at their choice of more than a dozen fast food and family-style restaurants along the one-mile strip.

McDonald's and Burger King sat next to each other on this strip. The McDonald's store was among the busiest in the region and, in fact, boasted the highest sales volume of any McDonald's restaurant in New England. It was situated on a corner, facing a large retail plaza, and separated from its closest neighbor, Burger King, by a tall picket fence. Abutting Burger King's other side was a Pizza Hut, and Wendy's was less than half a block away.

Both McDonald's and Burger King were decorated with the adult consumer in mind. Unlike many McDonald's restaurants, the West Lebanon facility had no children's play area, such as a Playland or PlayPlace. The interior was mostly done in burgundy and green, colors that appealed to adults, rather than the company's trademark bright red and yellow hues that attracted children. Reproductions of antique photographs showing local scenes and landmarks hung on the walls and distinguished it from other McDonald's stores.

Burger King prided itself on its décor, noting that restaurant décor had traditionally been important in creating memorable images for Burger King consumers. At the West Lebanon store, the dining area was large and round, wrapped by bay windows on three sides. In the center of the room, a large wooden pillar splayed out wooden beams across the ceiling. Several nondescript landscape pictures hung on the half-wall between the kitchen and dining areas and, in one corner, a small glassed-in room served as a place for children's parties. The overall impression was airy but generic.

Made for You at McDonald's

The McDonald's restaurant could seat 330 customers and offered parking for 224 vehicles—208 cars/trucks and 10 buses, and 6 spaces earmarked for patrons with disabilities. For patrons on the run (about 35%), there was a drive-thru—a three-window arrangement that required one stop to order, one to pay, and one to receive the goods. During slower times of the day, one or more of the windows' activities were consolidated into the others, reducing the staffing requirements. Breakfast, lunch, and supper were available seven days a week—Sunday through Thursday, from 6:00 a.m. to 11 p.m., and Friday and Saturday, 6:00 a.m. until midnight—at the counter and the drive-thru. Christmas was the only holiday on which the restaurant was closed all day. On Thanksgiving, the store stayed open from 7 a.m. to 11 a.m. as a service to holiday travelers. "We serve up quite a few breakfasts that morning," observed manager Gordon Wright.

There are three entrance points to McDonald's; two approached the counter from opposite directions and the third, not visible from the counter, was positioned at the rear of the restaurant, close to the restroom facilities. Six cash registers were paired off at the counter although most were not manned except during peak periods. Customers queued up in front of on-duty cashiers, sometimes creating an erratic flow as they shifted from line to line, trying to reduce their waiting time. After placing their orders, customers waited until the counter personnel assembled the order and then paid the bill. For years, McDonald's had targeted service times (time from entering queue until payment completed) of 1.5 minutes, but stores had historically averaged around 2.0 minutes.

Hamburger Production: The Traditional McDonald's Way

From the earliest McDonald's kitchens of the 1950's, the production system was designed around efficiency and consistent quality. Every restaurant aimed for uniformly high quality, low cost fast food, served quickly in a friendly, clean environment. Prior to the *Made for You* system installed in late 1999, the West Lebanon store operated like all of the others. As few as one person or as many as five people operated McDonald's grill area, depending upon how busy the store was at the time. These workers not only grilled the hamburger patties, they also caramelized the buns and dressed the sandwiches.

There were separate grills for regular-sized and quarter-pound patties. The former accommodated up to 48 standard patties, although usually batches of one to two dozen were cooked at a time. The quarter-pound grill, which operated at a higher temperature, held up to 20 of the larger patties. All patties were manually seared on both sides and removed in pairs when the light and buzzer system signaled a completed cooking cycle. After each batch, the grills were scraped clean.

Buns were heated by placing them on a hot platen, one side at a time. The heel was toasted or caramelized first, placed on a tray, and dressed while the crown was caramelized. A worker in the grill area applied condiments to the heel in premeasured doses from dispensers at the dressing table and added pickles and onions by hand. Then the trays of buns were

moved to the grill where patties were added and the sandwiches were capped. Completed sandwiches were then placed atop the warming bin for wrapping.

Bin workers not only wrapped the sandwiches, but also interfaced between production and counter workers, making sure the bin was stocked with enough of each sandwich type to satisfy current demand. Additionally, bin workers monitored product freshness by numbering the batches of sandwiches and tossing out any that were more than 10 minutes old. Bin workers were typically the most experienced and understood the flow of business during the day. Watching the incoming traffic and the bin inventories, they decided when to build sandwich supplies prior to rush periods to avoid backlogs that caused customer waits. The best bin workers even knew the effect of local events or the weather on customer demand, and were always watching the parking lot for arrivals of big groups. The position was essentially reserved for heavy traffic times; during slow periods, floating managers and counter personnel kept an eye on the inventory and called orders as needed to production staff.

Special orders were handled as an exception to the production and customer-service flow. When a customer requested a burger without onions, for example, the order was logged by the counter person and passed to the grill worker, who waited until the next batch of patties was removed from the grill. The sandwich was then assembled to the customer's order and delivered to the counter. Since this typically entailed a delay, special-request customers were asked to step aside while their order was being assembled, giving counter personnel the opportunity to wait on the next customer in line.

Frozen fries were partially thawed in wire baskets before they were dropped into one of three deep fryers in the production area. A beeper signaled the end of the cooking cycle—just over two minutes. The fries were then drained, deposited under heat lamps, salted, and, during busy times, scooped into bags. Fries not bagged within seven minutes were discarded. During heavy traffic, one person was assigned to handle this duty; otherwise, a grill worker or a "floater" handled it. ¹

Counter service personnel poured hot beverages and shakes, but customers who ordered soft drinks were given empty cups that they filled themselves from a self-service unit. This dispenser, which offered a variety of soft drinks (including Coke Classic, Diet Coke, flavored tea, Sprite, Barq's root beer, water, and ice), was perpendicular to, but visible from, the counter.

McDonald's believed that training was critical to the overall consistency of the dining experience. All new employees were required to watch a series of training tapes and go through a multi-stage training course devised by the manager. New workers started out during slow periods, working with veteran employees for a few shifts before they were assigned to run a customer service or fry station on their own. Generally, it took two to four weeks before an individual became proficient at any particular station. Workers were

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¹ Breakfast items were deep fried or cooked on the same equipment used for hamburgers.

encouraged, but not required, to learn all facets of the operation. The West Lebanon McDonald's manager emphasized that a critical component of his job was continually training the employees, even after they had significant experience.

Instructions posted on the equipment at each station specified how long each individual task should take to complete as well as how to do it properly. These instructions reinforced the corporation's training process. If a trainee forgot what to do, she had only to read the sign in front of her.

Hamburger Production: Made for You

The *Made for You* production process was both a natural extension of McDonald's use of process automation and a radical departure from the make-to-stock philosophy. Costing an estimated \$25,000 to \$85,000 per store, the key elements of the system were steamers, flash toasters, and a computerized ordering system. Some stores already had automation for french frying or even computerized order entry. The objectives of the system were to 1) allow for customized customer orders; 2) improve the service response time; 3) improve food quality and freshness as measured by the temperature of the sandwich, the crispness of the lettuce, and the sogginess of the bun. A complete description of the *Made for You* systems at the West Lebanon store is included in Exhibit 4.

Flame Broiled at Burger King

With a very similar menu, Burger King had created a distinct niche among fast food diners for both the taste of its food and its flexibility. It developed an assembly-line process that allowed quick *customized* service and promoted this distinction with the well-known advertising jingle:

Hold the pickles, hold the lettuce Special orders don't upset us All we ask is that you let us Serve it your way.

Burger King fans could have burgers their way seven days a week at the West Lebanon store—Monday through Saturday from 6 a.m. to 10 p.m. and Sunday from 7 a.m. to 10 p.m. This location offered 87 parking spaces near the restaurant, with three of those designated for persons with disabilities. The only parking for buses or other large vehicles was a more distant overflow parking lot shared with the neighboring Pizza Hut restaurant. This lot had 30 large parking spaces. The popular West Lebanon Burger King drive-thru featured two stops. Customers ordered at a microphone some distance from the building, then paid for, and picked up, their orders at the drive-thru window. Globally, approximately 50 percent of Burger King's business was drive-thru.

The only entrance to Burger King faced the counter and the illuminated menu above, so those were the first things customers saw when they entered the store. A metal railing

corralled customers to the single cash register behind the counter. There, the cashier placed their order, took their money, and handed them a numbered receipt. Customers then moved to one side and waited while the next person in line ordered. Burger King historically strove for 3 minute service times (time from entering queue until food delivered), but actual performance averaged slightly over 4 minutes. Recent drives to reduce service time had been effective in many stores (see Exhibit 3).

Hamburger Production

When an order was punched into the cash register, it appeared on overhead monitors in the kitchen area. In many Burger King restaurants, the order was also spoken into a microphone that broadcasted the request to the kitchen. The West Lebanon store had gradually phased out the microphones, depending more on the monitors. Unlike McDonald's, however, where all sandwiches—burgers, chicken, and fish—were assembled at one prep table, Burger King separated burger assembly from other sandwich prep.

It took at least two people to prepare a Burger King burger—one to cook, or "catch," and one to dress. The first person fed frozen burger patties and fresh bun halves into a combination broiler/toaster. The patties moved along an automatic broiler rack where they were "flame broiled" and emerged 80 seconds later fully cooked on the other side. Hamburgers, and the larger Whopper, could use the same automatic broiler because they were the same thickness. Toasted buns, which cooked faster than the meat, rolled off the continuous-chain toasting unit beneath the broiler. The "catch" person then matched bun halves, inserted a patty, and stored the sandwich in an adjacent steamer bin that kept it warm until it was dressed.

The steamer bin adjoined the "board," a stainless steel prep table that could be worked from both sides. When a hamburger order appeared on the overhead screen, the second staff person—the assembler—plucked the sandwich from the steamer bin and placed it on a labeled wrapper (stored below), squirted on condiments from individual squeeze bottles, and added desired toppings, such as lettuce or tomato. Then he wrapped the sandwich, heated it in a microwave for several seconds, and sent it down a chute facing the counter station. These chutes separated products by category, allowing counter personnel to identify and separate the products quickly and easily. Because prepared sandwiches were discarded if they had not sold after 10 minutes, the discard time was marked on the wrapper, as was any customer special request. During busy periods, sandwich assemblers were responsible for ensuring that the chutes were stocked with an adequate number of assembled standard sandwiches (as specified in a chart above the chutes), while the "catch" person oversaw inventory in the steam bin. When times were slow, fewer burgers were stored in the bin and all sandwiches were assembled when they were ordered. Special orders always were assembled when the order was placed.

Nearby, the fry cook filled wire baskets with french fries (and onion rings) and deep-fried them in computer-controlled fry vats, pulling them from the hot oil when the buzzer sounded, indicating cooking time was complete. The fries were drained briefly, deposited in heated wells close to the landing table, and salted. If they weren't scooped into bags within

seven minutes, they were discarded. Once bagged, however, fries were held only two minutes before being tossed.

At the counter, a second staffer shoveled the fries from the wells into various-sized bags, added the sandwich of choice and a cup for self-dispensed soft drinks, or poured the drink itself (for coffee and shake orders), and either bagged the items for take-out or placed them on a tray with a copy of the receipt and passed it to the customer. This individual wore a headphone unit to maintain voice contact with kitchen personnel, alerting the staff to special orders and ensuring production kept up with demand.²

The soft-drink dispenser in the dining room offered a selection similar to that at McDonald's (Coke, Diet Coke, Sprite, Barq's root beer, Splurge, and two types of iced tea). The unit was only partially visible from the counter.

Most of the people who worked at the Burger King were recruited through media advertising, on-site advertising, and referrals from employees or school counselors. Training began immediately. New hires toured the facility and were expected to review the employees' handbook they received. They also watched a series of short training videos in the office over time. Generally, trainees started out working the counter or the broiler during slow periods. Veteran workers were expected to provide them with guidance and supervision during their first couple of shifts. Over time new employees were trained to work all parts of the operation.

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² Breakfast items presented a challenge for Burger King when they were first introduced. Eggs were cooked on grills that were heated by the oil in a frying vat.

Exhibit 1 – Advertising Slogans Through the Years

Burger King

1958: "Burger King, Home of the Whopper"

1974: "Have it Your Way"

1982: "Aren't You Hungry?/Battle of the Burgers"

1987: "Best Food for Fast Times/We Do It Like You Do It"

1989: "Sometimes You've Gotta Break The Rules"

1991: "Your Way Right Away"

1994: "Get Your Burger's Worth"

1999: "When You Have It Your Way It Just Tastes Better"

2002: "At BK, You Got It!"

McDonald's

1961: "Look for the Golden Arches"

1971: "You Deserve a Break Today-So Get Up and Get Away to McDonald's"

1975: "We Do It All For You"

1979: "Nobody Can Do It Like McDonald's Can"

1981: "You Deserve a Break Today. Nobody Makes Your Day Like McDonald's Can"

1984: "It's a Good Time for the Great Taste of McDonald's"

1990: "Food, Folks and Fun"

1995: "Have You Had Your Break Today?"

1997: "Did Somebody Say McDonald's?"

2000: "We Love to See You Smile"

2002: "Smile"

2003: "I'm Lovin' It"

Exhibit 2 – Shopping for Value³

Both McDonald's and Burger King sold reduced-price combination meals on their menus. McDonald's offered nine combinations of sandwiches, fries, and beverages—ranging from small to supersize—that it called Extra Value Meals. Burger King provided a similar service, but added one more combination for a total of 10 Everyday Value Meals. Item by item, McDonald's was more expensive, as the following chart demonstrates:

Burger King	McDonald's
Hamburger \$.89	Hamburger \$.99
Cheeseburger \$.99	Cheeseburger \$1.09
Whopper \$2.19	Big Mac \$2.49
Whopper Jr. \$.99	
Medium fries \$1.19	Medium fries \$1.55

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³ Pricing as of April 2000

Exhibit 3 – Average Service Speed⁴

Wendy's 2 minutes, 30 seconds

McDonald's 2 minutes, 47 seconds⁵

Checkers 2 minutes, 49 seconds

Burger King 2 minutes, 51 seconds

Long John Silver's 2 minutes, 52 seconds

⁴ Source: Wall Street Journal, Sparagowski & Associates, May 18, 2000.

⁵ Reflects McDonald's Made *for You* adoption.

Exhibit 4 - Description of Made for You Production Process with Task Automation

The *Made for You* production process was both a natural extension of McDonald's use of process automation and a radical departure from the make-to-stock philosophy. Installed in most North American stores in 1999/2000, the West Lebanon store was typical of most. The key kitchen positions included at least one person on "batch" cooking meats, one "initiator" beginning the sandwich assembly process, and one "assembler" completing it. A fourth person cooked french fries.

The batch person placed a number of burger patties on four two-sided clamshell grills (so-called because they closed like a clamshell)—two designated 10:1 for "regular" burgers (10 patties to one pound of meat) and two designated 4:1, specifically for quarter-pounders. Actually, only nine burgers fit on the 10:1 grill at any one time, so the maximum simultaneous output of a batch person was 30 patties (18 on 10:1 and 12 on 4:1 grills). Cooking was automatically timed; the clamshell popped open when the meat was cooked. Patties were then placed on trays and stored inside universal heating cabinets (or steamers), known as UHCs—covered units heated to 200 degrees that kept the patties hot. Trays were timed to remain in the UHC only 20 minutes. After this time, the patties were discarded. Only enough patties were cooked to meet the level of current sales or volume pattern for each hour.

Once a customer ordered a burger, the counter person punched the request into the computer and the order appeared on overhead monitor in the assembly, or prep, area. The predominant feature in this section was a two-sided prep table, affixed with a top-loading toaster at one end, condiment guns in the middle, and UHCs at the other end; wrappers and boxes were stored underneath. Two monitors were stationed overhead at both extremes. Generally, two people—an initiator and an assembler—worked this table, although their number doubled during peak hours.

When an order appeared on screen, the initiator took a split bun from the bun cart and dropped it into a high-efficiency toaster, removing the toasted halves that slid out, placed them on the correct wrapper (color-coded and clearly labeled), and applied condiments in pre-measured doses from an automatic dispenser. The bun was then passed to the assembler, who added appropriate toppings, such as pickles, lettuce, and cheese, to one half and placed a meat patty from the UHC on the other, wrapped the sandwich securely, and placed it on the heated landing zone—a heated table within the counter service area—where it remained warm until it was passed to the customer who ordered it. The initiator and assembler worked together, so the division of labor was not always strictly observed. During peak times, however, a third staff member—the UHC person—was added, and roles were more narrowly confined: The initiator cooked the buns, the assembler dressed them, and the UHC person added the patties, wrapped the sandwiches, and placed them on the landing zone.

Fries were cooked separately by another staff member on a robotic automatic machine (RAM) dispenser. Six-pound bags of frozen fries were loaded into the RAM's hopper that was calibrated to dispense one and a half pounds of fries at a time into a fryer basket. The baskets were dropped into wells filled with hot cooking oil and, although automatically timed, were manually removed from the oil.