



IBM and Germany 1922–1941

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Abstract

In 1941, one of IBM's most profitable customers was the German government. Germany leased IBM's punch card tabulation machines (ancestors of the computer), and used them in its war against France, the United Kingdom and others. They were also used to conduct the census, to keep track of Jews and other "undesirables", and to operate the concentration camps. In 1937, Hitler awarded Watson a medal. By 1940, however, US public opinion had turned against Germany and he returned the medal. Outraged, German IBM executives and high-ranking Nazis threatened IBM's control over its subsidiary. Although its activities were legal under US law, IBM was concerned about maintaining control of its German division, shielding itself from criticism in the US, and remaining eligible for more German government contracts. Watson needed to decide whether to maintain IBM's lucrative relationship with Germany, make a clean break (and lose all its assets), or perhaps do something entirely different.

Organization Management Journal (2008) 5, 208–213. doi:10.1057/omj.2008.25

Keywords: IBM; Germany; business ethics; Nazi; Dehomag



Organization
Management
Journal

1922–1935

In 1922, IBM, then known as "The Computer-Tabulating Recording Company", acquired Deutsche Hollerith Maschinen Gesellschaft, herein referred to as Dehomag, a German punch-card company (Avl, November 1972). Dehomag's founder and general manager, Willy Heidinger, stayed on to manage the business. IBM let him keep 10% of the stock, under the condition that if he left Dehomag, he had to sell it back to IBM. Heidinger resented this and IBM's control in general, but that did not interfere with Dehomag's profitability. In spite of Germany's disastrous post-World War I economy, Dehomag grew – opening its first plant in Sindelfingen, Germany in 1924. By 1927, Dehomag's profits exceeded \$400,000 (Black, 2001) in a year when IBM's gross income was \$14 million and net earnings were \$4 million (IBM, n.d.).

In 1933, Dehomag built a new plant in Berlin. By then, IBM's total annual income was on its way to a record \$17 million, with \$6 million in net earnings (IBM, n.d.). Dehomag provided a significant part of this – over half of IBM's overseas income (Black, 2001).

Dehomag's income came primarily from leasing punch card sorting equipment and selling raw materials – mostly punch cards customized to meet customer needs. Dehomag had the license to use IBM's proprietary card sorting and tabulating technology in



Germany. IBM had a much stronger reputation and much more market penetration than any of its competitors (Black, 2001).

In January of 1933, Adolf Hitler became Germany's Chancellor and publicly promised to create a master race, to dominate Europe, and to eliminate Jews from Europe. A few weeks later, in February, Germany's parliament building burned down. Hitler blamed this on the Communists and asked for emergency powers to combat the Communist threat; powers were granted by frightened legislators. A month after this, in March of 1933, the Nazi government created the first concentration camp for Jews, political prisoners, and others. In the next month, April, the Nazi regime began restricting the civil rights of Jews and other "non-Aryan races." One law fired all Jews from civil service jobs; other laws barred Jews from practicing law and limited the number of Jews who could enroll in German high schools. More and more employment opportunities and professions were denied to Jews – from editing a newspaper to owning land to working in the arts. By mid-1933, half a year after Hitler took power, 60,000 Jews were in German prisons (Wiesenthal Center, 2004). Newspapers reported these events in Germany, but the American press was confused and skeptical with regard to "Nazi anti-Jewish measures" and "most Americans felt no obligation to concern themselves with foreign countries" (Turner, 2001: 637). In 1933, the US Government did not have laws against trade with Germany (Black, 2001).

In 1933, Dehomag's largest contract was for leasing machinery to tabulate the German census. Like previous German census questionnaires, the 1933 questionnaire asked for information about religion and native language that could be used to identify "undesirables" in the population (United States Holocaust Memorial Museum, 2004). When census workers found someone who was Jewish, they used a special, separate card that noted the person's birthplace. These cards were not processed with the standard census information, but were handled separately (Kisterman, 1997). The success of Dehomag's census contract led to additional work scheduling the German railroads. Dehomag's punch card machines were also used to compile "nearly all the medical, health and welfare statistics in Germany" (Black, 2001: 94).

IBM and Dehomag welcomed the money this new work brought in. But the German government restricted the movement of currency out of the country, which was still recovering from the

depression and hyperinflation of the 1920s. IBM worked around this by listing patent royalty payments Dehomag made to IBM USA on Dehomag's income statement as "expenses" rather than dividends, which exempted them from the restrictions. IBM's President, Thomas Watson, then had these royalty payments posted to a bank account in Switzerland, where they would be more accessible for later transfer to the US if needed. Dehomag invested the rest of its profits in Germany, as they could not be legally transferred outside the country.

At the January 1934 ceremony celebrating the opening of a new Dehomag plant in Germany, IBM President Thomas Watson's personal representative and many Nazi officials attended. Willy Heidinger, a Nazi supporter and Dehomag's general manager, gave a speech in which he said

The physician examines the human body and determines whether ... all organs are working for the benefit of the entire organism. We [Dehomag] are very much like the physician, in that we dissect, cell by cell, the German cultural body. We report every individual characteristic ... on a little card ... We are proud that we may assist in such a task, a task that provides our nation's Physician [Adolf Hitler] with the material he needs for his examinations. Our Physician can then determine whether the calculated values are in harmony with the health of our people. It also means that if such is not the case, our Physician can take corrective procedures to correct the sick circumstances Our characteristics are deeply rooted in our race. Therefore, we must cherish them like a holy shrine, which we will – and must – keep pure. We have the deepest trust in our Physician and will follow his instructions in blind faith, because we know that he will lead our people to a great future (Heidinger, 1934).

Watson received a translation of this speech along with a list of the Nazi officials that were invited to the ceremony. He sent Heidinger a telegram congratulating him for a job well done and for the sentiments he expressed so well (Black, 2001: 51).

It was likely that the president of IBM was aware of Hitler's oppressive actions (Allen 2002). Protest demonstrations against the new German government's actions passed near Watson's office on Madison Avenue in New York City. On 10 May 1933, more than 100,000 marchers in New York City demanded that all American companies stop doing business with Germany. IBM was not specifically targeted in the protest, most likely because the Dehomag name shielded IBM from publicity about its activities in Germany (Black, 1984).

The question confronting all American businessmen who traded with Germany in 1933 was whether trading with

Germany was worth either the economic risk or moral descent. The question faced Watson at IBM as well. Watson's primary concern in regards to Dehomag was to maintain IBM's dominant position in the German market, but IBM was in a unique commercial position. While Watson and IBM were famous on the American business scene, below the public's awareness, the company's overseas operations continued helping the German government. IBM did not import German merchandise; it merely exported American technology. The IBM name did not even appear on any of thousands of index cards in the address files of leading New York boycott organizations. Moreover, the American public and business community had not yet realized the power of punch cards to automate statistical processes in organizations. So the risk that highly visible trading might provoke economic retaliation seemed low, especially since Dehomag did not even possess a name suggestive of IBM or Watson. (Black, 2001: 40)

1935–1938

In the years that followed, Nazi Germany further reduced the civil rights of German Jews. Race laws passed in 1935 banned them from labor unions, from the military, and from performing in cultural events. And by 1936, a special division of the Schutzstaffel (SS) had been established specifically to operate the concentration camps (Wiesenthal Center, 2004).

As this happened, world condemnation of Nazi oppression increased, and countries adjoining Germany boycotted it, helping to isolate it from foreign trade. Despite this, "most major US companies sold to Nazi Germany, and many ran factories inside the country" (Maney, 2003: 204). US companies did this not only to make money, but also because they feared that if they stopped doing business with Germany now, they would be locked out of the European market later (Maney, 2003).

Germany only let German-owned companies do business with the government. To get around this, IBM successfully disguised its ownership of Dehomag with a complex director stock ownership scheme. Dehomag's sales flourished as more areas of German government and industry adopted punch card technology to manage complex data. For instance, in 1935, Dehomag handled 140 million reservations for the German National Railroad (IBM Deutschland, 2005). Watson made several trips to Germany (*New York Times*, 1933; Black, 2001) and was impressed with the Germans' use of punch cards to manage information in many key industries. Dehomag obtained major contracts with the German army, navy, and air force. Germany's armed forces regarded IBM's punch card technology to be so essential that in 1937, they took control of all punch card machines and

allowed them to be used only by organizations that it approved.

Watson was elected President of the International Chamber of Commerce in 1936. In 1937, Watson visited Europe and received decorations from Sweden, Yugoslavia, Belgium, and France. The International Chamber of Commerce scheduled its 1937 annual meeting in Berlin, where Hitler presented Watson with Germany's second-highest honor for foreigners – a medal that honored Watson for promoting a cause that he spoke about frequently – world peace through world trade (*New York Times*, 1937a, b; Tedlow, 2003). After receiving the medal, Watson traveled to Italy to meet Mussolini, "having long admired him for the order he had brought to Italy" (Belden and Belden, 1962: 196). At an IBM sales convention in Italy, Watson said, "the present generation in Italy is going to benefit greatly as a result of the pioneering work of your leader, Mussolini" (Maney, 2003: 209). Watson also received an award from Mussolini's fascist government (Sobel, 1981).

In his autobiography, Watson's son wrote about his mother during this period and how she told him of her concern for her friends in Berlin, including a Jewish family, the Wertheims. Even though the Wertheims owned one of Berlin's largest department stores, they had their store windows smashed by Nazi gangs, were expelled from Germany, and were forced to sell their store for almost nothing (Watson, 1990).

Maney (2003), one of Watson's biographers, noted that

Watson spent more than a month traveling in Europe and meeting kings and prime ministers, and in the prickly atmosphere of 1937, every conversation must have turned to Germany and its mistreatment of not only Jews, but of Catholics and anyone not considered a member of Hitler's master race. Watson regularly read newspapers and magazines, which reported the Nazi atrocities. He received information from IBM's European offices. He knew about the Wertheims. He knew more than most Americans about the events in Germany (p. 209).

Still, Watson felt that Germany was the victim of bad publicity and deserved to be part of the community of world trade. Watson drafted a letter to the German economics minister in which he described "the necessity of extending a sympathetic understanding to the German people and their aims under the leadership of Adolf Hitler." The draft letter ends with "an expression of my highest esteem for himself [Hitler], his country and his people" (Watson, 1990, cited in Black, 2001).



The Nazis honored other US executives besides Watson. In 1938, a few months after Germany annexed Austria, the Nazis awarded Henry Ford the Grand Cross – the highest honor for foreigners. A month later they gave the same award to a General Motors (GM) executive. GM made aircraft and trucks for the German army and air force (Dobbs, 1998). As IBM noted in a 2001 press release about its involvement with Nazi Germany, “hundreds of businesses did business in Germany at that time” (Makovich, 2001). In fact, “most major US companies sold to Nazi Germany, and many ran factories inside the country” (Maney, 2003: 20). This, despite the fact that

German intentions became clear to Americans in November 1938, when the rage of *Kristallnacht* swept across Germany. Nazi gangs, directed by Hitler, shattered the glass of every building owned by a Jew, set fires and looted Jewish homes and businesses, and beat Jews in the street. American newspapers rang out with banner headlines, and American public sentiment turned sharply against Hitler (Maney, 2003: 214–5).

Watson knew of the difficulties German Jews were facing, and privately, he even helped a few to escape (Maney, 2003). But Watson’s major concern about Germany was Dehomag and his obligation to IBM shareholders. As Germany was IBM’s second-largest market (Maney, 2003), he did not want the German government to set up a competitor to Dehomag. He wanted to make sure that IBM would thrive in Germany over the long term.

1939–1941

Watson continued his advocacy of world peace through world trade. At “IBM Day” at the New York World’s Fair, Watson gave a speech to thousands about the importance of universal peace and how increased world trade would eliminate the need for countries to go to war in order to obtain resources they need (*New York Times*, 1939a). Watson was even a trustee of the Carnegie Foundation for International Peace. But while he gave speeches on peace, his company was taking orders from and delivering punch card machines to the War Ministries of Germany, Yugoslavia, Romania, Poland, Sweden, and France (Black, 2001: 203–5). IBM’s subsidiaries “sold and maintained [its punch card machines] to France to replace [ones] destroyed by bombing runs designed by [IBM’s punch card machines] in Germany” (Sebok, 2001).

In 1939, Dehomag again received the contract for the German census. According to the *New York Times* (17 May 1939b),

It will provide detailed information on the ancestry, religious faith and material possessions of all residents. Special blanks will be provided on which each person must state whether he is of pure “Aryan” blood. The status of each of his grandparents must be given and substantiated by evidence in case of inquiry.

Sources other than census records, such as “marriage, tax, Chamber of Commerce, and Jewish community records (supplemented by numerous and ready informants)” (Hayes, 2001), were also used to track people’s racial identity. One Nazi official said that this census

is intended to also determine the blood-wise configuration of the German population ... the results could also be recorded on the police department’s technical registration cards. The police would thus gain an insight into the racial composition of the persons living in their jurisdictions. And this would also accomplish the goals set by the Main Office of the Security Police. (Quoted in Aly and Roth, 2000: 76)

In 1939, Hitler set out to conquer most of Western Europe. Anticipating Germany’s expansion of its borders, Dehomag negotiated for permission to expand its operations into the rest of what was soon to be German controlled Europe. IBM formed a new subsidiary in Poland called Watson Business Machines to replace its former licensee, which was weakened by the German invasion (Black, 2002).

Germany passed more anti-Jewish laws, banning Jews from professions such as teaching, accounting, and dentistry. Jews were denied tax deductions and child allowances. Apparently only now upset by Nazi policies towards Jews and others, Watson wrote a letter to Hitler, pointing out the economic damage that could accrue to Germany by “a loss of good will to your country.” He also wrote, “I respectfully appeal to you to give consideration to applying the Golden Rule in dealing with these minorities” (Watson, quoted in Maney, 2003: 218).

As the German army invaded and occupied Austria, Czechoslovakia, and Poland, the government accelerated its relocation of Jews to concentration camps. Census and other data were quickly assembled and processed using Dehomag equipment – allowing the SS to analyze rapidly the requirements for railcars, food, and other resources for the concentration camps across its newly occupied territories (Black, 2001).

Dehomag designed custom programs so that its machines could be leased to concentration camps.

“As of 1940 and 1941, IBM USA inventories documented the location of Hollerith machines in camps ... along with their serial numbers and the amounts paid for the lease of each machine” (Hausfeld, 2001). Punch card data helped camp administrators track the amount of food needed to keep prisoners alive for a minimum amount of time; to identify prisoners; to keep track of prisoners’ ethnicity (including the degree of Jewish and Aryan background) and religion; to determine work assignments; to keep track of punishments administered to each prisoner; to record whether a prisoner was able to work; and to maintain death statistics. To simplify data analysis, prisoners were tattooed with a five-digit code that corresponded to the punch card containing their demographic data. When a German factory needed prison laborers with particular skills, Dehomag’s punch cards were used to identify such prisoners (Black, 2002) and move them to where they were needed (Table 1).

Business was booming for Dehomag. By 1940, it employed over eight times as many people as it did only 10 years earlier (see Table 1). Its business with the German government, Dehomag’s primary customer, also grew. Its machines kept track of German munitions, spare parts for the German fighter planes and bombers, combat orders, and troop movements. IBM’s activities were legal, and royalty payments to IBM continued to flow to the US through its Swiss bank account.

But by June 1940, the US had become even more anti-Nazi. Germany had invaded France and was bombing Paris (*New York Times*, 1940a). It had also invaded and occupied the Netherlands, where the Gestapo was rounding up “enemies of Germany,” and of these “nearly all have faced firing squads” (*New York Times*, 1940b). Germany invaded and occupied Belgium, and was at war with Britain.

Watson did nothing to reduce IBM’s involvement in Germany, but he did return the medal he

received from Hitler, saying, “the present policies of your government are contrary to the causes for which I have been working and for which I received the decoration” (*New York Times*, 1940c). As a result, “congratulations swamped Watson’s office” (Maney, 2003: 220). But the Nazi party officials responsible for awarding huge contracts to Dehomag were outraged. They believed Watson had given in to pressure from the Jewish community and to Jewish anti-German propaganda (*New York Times*, 1940c; Rodgers, 1969). Incensed by Watson’s insult to Hitler, Heidinger, and the other Dehomag directors tried to unseat IBM headquarters’ representative on the board, even though he controlled 85% of the shares.

Heidinger had always bristled under IBM’s control and he threatened to sell his shares back to IBM, which would destroy the illusion that Germans owned Dehomag. Watson was in a difficult position. Beatty (2001) captures one side of this difficulty well:

You are Thomas Watson, the founder of IBM, and you face a choice ... You must know that the census and other work your German branch has performed for the Nazis has been used not just to count cars and cows but to identify Jews ... You have visited Germany; you were in Berlin in July 1935, when Black Shirts rampaged through the streets smashing the windows of Jewish stores, and forcing your friends, the Wertheims, to sell their department store for “next to nothing” and escape to Sweden ... Hitler has invaded France ... executives of your German subsidiary want you to sell out to German principals. With Hitler moving to occupy all of Europe, this is a chance for a clean break. True, the United States is not yet in the war, but Hitler’s bombs are falling on London.

Despite this, there were also pressures on Watson to keep Dehomag operating in Germany. Even though high-ranking Nazis wanted to cancel Dehomag’s contracts and give them to a weaker competitor, they had already invested a great deal in the IBM punch card technology. “The Third Reich found the [punch card] machine invaluable” (Spencer, 2001: 1558). IBM’s actions were legal under US law, but Watson still wanted to maintain the illusion that Germans owned Dehomag; this shielded IBM from criticism in the US and kept Dehomag eligible for government contracts in Germany. Royalty payments continued to flow from Dehomag to IBM via Switzerland. The royalties could dry up if Dehomag lost the inside track with the Germans that Heidinger provided (Black, 2001). Looking back, one historian wrote in *Business Week* that “Unless Watson was prepared to write off his assets in Germany... he had little

Table 1 Employees at dehomag

Year	Dehomag employees	IBM employees
1930	298	6,346
1933	462	8,202
1935	1,119	8,654
1940	2,561	12,656

Source: IBM Deutschland (2005) and (IBM highlights).



choice but to put the best face on happenings there, or to bite his tongue, and cultivate good relations with German leaders". (Hayes, 2001: 20)

Watson had to decide whether to "sell out or fight to hold on to Dehomag" (Beatty, 2001). Or perhaps do something entirely different.

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Article in *Organization Management Journal* · December 2008

DOI: 10.1057/omj.2008.25

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