Union Pacific: Through Deregulation & Beyond

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The case examines Union Pacific around deregulation of the railroad industry as it faced multiple crises and changed strategic course. It paints a picture of an industry shaped by environmental forces, which intersected to define Union Pacific's competition in and with the trucking industry. It captures the industry's sometimes-adversarial relationship to its labor unions and witnesses the transformational role played by technology. It sets the stage for the instructor to discuss regulation and labor unions – two controversial but important topics influencing business decisions – by asking the reader to consider whether the time is right to strategically reenter the trucking industry.

INTRODUCTION

Shawntell Kroese, Assistant Vice President of Domestic Intermodal Sales glanced out a wall of windows in Union Pacific's corporate headquarters, out onto blue skies and sunlit city of Omaha. She could hear the hurried footsteps of John, an undergraduate college student who'd scheduled an appointment to interview her approaching down the hall – he was just on time. "Hi," he said, sitting down and smiling. "How was the drive?" Shawntell asked. "It was alright" said a breathless John "but I got into a traffic jam on I-80. Sorry, I was going to be here early and everything." "No problem," she replied, "I'm just glad you are here." John took a digital recording device out of his backpack and clicked a button: "So, for my first question… I know Union Pacific has been doing very well recently, with record earnings and everything. I was wondering… Do you think you'll end up expanding into the trucking industry?" Shawntell was surprised. That's was a pretty big question! She wondered how much research John had done ahead of the interview. All that she knew of the trucking industry and Union Pacific instantaneously flashed to the forefront of her mind…

BEFORE THE AUTOMOBILE

By signing the Pacific Railroad Act of 1862, President Abraham Lincoln put two companies in charge of the construction of the first transcontinental railroad: Central Pacific and Union Pacific Railroad (Union Pacific [UP], 2013b). Union Pacific was responsible for building westward from Omaha, NE to meet the Central Pacific who built east from Sacramento, CA (UP, 2013a). In 1869, the golden spike was driven in at Utah, and the transcontinental Railroad was complete (UP, 2013b).

As time got on, many railroad customers became alarmed that in locations where there was no railroad competition or when railroads colluded, railroad rates tended to be high (Saunders, 2003). On the other hand, where railroads competed, rates were lower (Saunders, 2003). Railroads argued they needed the extra income from non-competitive areas to make up the loss suffered at less profitable, and more competitive, locations (Saunders, 2003). The shippers who were adversely affected tended to see this kind of pricing as unfair (Saunders, 2003).

Interstate Commerce Commission (ICC) was created in 1887 to oversee the railroads – ICC was the first independent regulatory agency created by the US government (UP, 2013b). ICC's central goal was to balance the railroads' need for a fair return with the shippers' need for a predictable rate schedule (Saunders, 2003).

In 1893, Union Pacific went bankrupt (UP, 2013b). The company joined over 15,000 American businesses which fell into bankruptcy in the Panic of 1893, a crisis that was reportedly triggered by a multitude of businesses overextending themselves as they borrowed money for expansion (Ohio History Central, n.d.). In 1897, Union Pacific was sold at foreclosure to a small group of investors (UP, 2013e). One of these investors, E.H. Harriman, spent the next decade restoring the company to prosperity (UP, 2013e). He acquired properties, modernized locomotives, enlarged operations yards, and doubled-tracked hundreds of miles (UP, 2013e).

Shippers, including the coal and chemical industries and farmers, tended to support regulation because it meant that railroads subsidized transportation costs for them (Saunders, 2003). According to historian Richard Saunders, some in the railroad business originally liked that regulation insulated railroads from brutal competition with each other (Saunders, 2003). However, trucks riding on government sponsored roads would eventually change the railroads' industry attitude about regulation (Saunders, 2003). From Union Pacific's "Post-Construction" history web page in 2013, it seemed that Union Pacific ultimately came to view regulation negatively. According to up.com, "government regulators used public dislike of railroads during the late 19th century to cripple a 20th century industry, as well as the industry dependent on it" (UP, 2013e).

TRUCKS COME ROARING IN

Until the 1920s, highways and trucks were too primitive to compete with railroads (Solomon, 2007). After World War I, labor costs in Northeast and New England increased and industries moved south and to the west to find cheaper labor (Solomon, 2007). Railroads faced the challenges of following these industries to their new locales. The government unintentionally competed with the railroads by funding the construction of new highways around the nation (Solomon, 2007). Partly due to this funding, highways gradually started to become a more affordable and convenient means of transport (Solomon, 2007).

Trucks would prove to be a powerful nemesis to the railroads. Truck transportation was frequently faster and cheaper, offered more flexible services, and utilized railroads maintained by the public (Klein, 2011). Large companies employed truck owners as independent contractors, thus reducing capital investment and increasing their own flexibility (Klein, 2011). Because trucks had no common carrier obligation, they could select most lucrative traffic (Solomon, 2007). Railroads, on the other hand, had an obligation to carry any freight that was presented to them (Saunders, 2003).

As can be seen in Table 1 below, railroads gradually lost their hold on percentage of total traffic. In 1940, railroads carried 61.3% of total United States freight traffic (Saunders, 2003). Forty years later, they carried only 37.2% (Saunders, 2003).

TABLE 1
RAILROAD TRAFFIC IN THE 20th CENTURY

Year	Railroad Ton-Miles	% of Total Traffic	Employees (thousands)	Ton-Miles/ Employee
1900	141	NA	1018	138,500
1920	414	NA	2023	204,647
1940	373	61.3	1027	263,194
1960	575	43.6	781	732,394
1970	765	39.8	566	1,351,590
1980	919	37.2	459	2,002,787
1990	1,034	37.7	216	4,787,037
1998	1,356	40	182	7,450,549

Source: Moody's Industrial Manuals as cited by Saunders, R., & Saunders, R. (2003). *Main lines: Rebirth of the North American railroads, 1970-2002*. DeKalb: Northern Illinois University Press.

Railroads fought against the encroaching truck by innovating. According to Union Pacific's website, up.com, "the loading and unloading of freight cars became a science" and other aspects of railroading, such as locomotives and mileage per freight car, were improved (UP, 2013e). ICC, however, in its quest to reduce competition within the railroad industry, occasionally provided obstacles. In 1961, Southern Railway introduced a 100-ton-capacity covered hopper car nicknamed "Big John" to replace the standard 25-ton-capacity 40-foot boxcar (Saunders, 2003). The "Big John" would permit Southern Railway to transport grain more cheaply than before (Saunders, 2003). Southern Railway now could charge $3.97 a ton (for a lot that as at least 1,800 tons) rather than the old rate of $10.50 (Saunders, 2003). ICC turned the petition down, arguing that it would harm other railroad carriers who did not have or could not afford the new cars, as well as business on waterways (Saunders, 2003). The case went to Supreme Court twice, and in 1965, ICC ultimately approved the requested rates (Saunders, 2003).

By the 1970s, the entire railroad industry was struggling. In 1978, railroads earned only 265 million out of gross income of 22 billion (Klein, 2011). Between 1975 and 1979, the rate of return of all railroads was 1.71 percent, on average (Saunders, 2003). This was lower than the railroads' rates of return during the worst of the Great Depression (Saunders, 2003). Such rates were smaller than the cost of borrowing money to repair a railroad's physical assets (Saunders, 2003). If this level of rates continued, it was likely that more railroads would go the way of the Penn Central Railroad, which filed for bankruptcy in 1970 (Lehman Brothers Collection, 2012). Ten railroads had gone bankrupt since 1967, and four were in bankruptcy or on the road there (Klein, 2011).

Union Pacific performed relatively well during the 1970s (Saunders, 2003). In 1975, one of the worst years of the American railroading history, UP earned a net operating income of $113 million (Saunders, 2003). The rest of the industry – put together – earned $21 million (Saunders, 2003). In 1976, the Railroad Revitalization and Regulatory Reform (4R) Act was passed (Bloomberg Businessweek, n.d.). The act made $2.1 billion of repayable financing available to midwestern and northeastern railroad companies (Bloomberg Businessweek, n.d.). The 4R act was a step towards deregulation. It enabled the railroads price service up or down within a 7% range if they did not control more than 70% of traffic within a particular area (Saunders, 2003). However, ICC still had to review each application for a rate change (Saunders, 2003). This was slow relative to the private trucking industry because private truckers could make up rates "on the spot" as they negotiated with customers (Saunders, 2003). By the time ICC approved the railroads' rate change, months could have passed, and the customer may have been lost (Saunders, 2003).

Railroad's share of intercity (between cities) freight fell to a low of 36% in 1978 (Saunders, 2003). In the same year, trucks carried 25%, pipelines 23%, inland waterways 16%, and airlines 2% (Saunders, 2003). After World War II, the airlines had also negatively affected the railroads by taking up much of the long-haul passenger business (Klein, 2011). As can be seen in Table 1, even in 1970s, when railroads were at the height of their struggle, ton-miles (measure of the work done by railroads) increased (Saunders, 2003). Railroad volume was increasing, but the percentage of the total taken by railroads was decreasing (Saunders, 2003).

Trucks' tendency to "steal" the most lucrative traffic was observed by Erie Railroad's vice president of traffic when he spoke in 1954: "Trucks take only the kind of business they want. They skim off the cream. We can't live on milk. We want cream" (Solomon, 2007, p.22). In 1969, trucks took in 75% of intercity revenue while carrying an approximate of only 21% of intercity ton-miles (Solomon, 2007). Railroads, meanwhile, took in 25% of revenue while hauling 41% of intercity ton-miles (Solomon, 2007).

John Kenefrick, who became CEO of Union Pacific's transportation division in 1970, said that at one point trucks took away the most valuable part of the sugar refining business – hauling sugar – leaving the far less profitable business of hauling beets to UP (Klein, 2011). "It was really a hopeless sort of situation," he observed (Klein, 2011, p.181).

In 1969, Union Pacific had spun off its oil, natural gas, coal and soda ash resources (which the company originally received as part of land grants) off as subsidiaries (Saunders, 2003). This was done to preserve them in case the railroad was nationalized or went bankrupt (Saunders, 2003). Union Pacific also received royalty income from other companies leasing its land (Klein, 2011). Between 1969 and 1974, 79% of Union Pacific's net income was earned from its railroad, rather than the subsidiaries (Klein, 2011). Between 1979 and 1982, railroad business only contributed 38.3 percent to net income (Klein, 2011). Union Pacific came to wonder if there are more opportunities for greater returns in the non-railroad industry (Klein, 2011). Union Pacific leaders increasingly saw railroad as a "cash cow but not one to invest in" – they began considering diversifying into other businesses which could increase shareholder value (Klein, 2011, p.201).

In a 1987 annual report, Union Pacific would write: "the Corporation is shifting from a very basic asset-oriented company concentrating on the Railroad and the natural resource businesses to a Corporation determined to be on the leading edge of technology in delivering multi-modal transportation services, environmental services, creative oil and gas exploration programs and profitable real estate ventures" (Klein, 2011, p. 214).

One of the companies that Union Pacific purchased on its quest to diversify away from the railroad was a trucking company Overnite – in 1986 for $1.2 billion ("UP unloading truck unit," 1998). Overnite was the fifth largest trucking firm in United States, serving 34 Eastern states, with 10,400 non-unionized employees and 1985 sales of $470 million, and no debt (Klein, 2011). Overnite was a "less than truckload" firm – it charged higher fees for smaller shipments (versus a flat rate for entire load) (Klein, 2011). Union Pacific hoped for synergies from its relationship with Overnite and desired to "broaden UP's transportation footprint" (Klein, 2011, p.210). Not all in Union Pacific leadership agreed with the decision to acquire Overnite, especially given the high price that had been paid (Klein, 2011).

RELEASING THE TRAINS

In 1980, President Jimmy Carter signed the Staggers Rail Act, which partially deregulated the rail industry (UP, 2013b). Staggers Bill meant that railroads could sign private contacts with shippers and set rates on their own (Klein, 2011). This meant that railroads could now compete on price differences, rather than service, as had been the case for most of 20th century (Klein, 2011). John Kenefick stated that Staggers Act was the most important development in the postwar industry – even more important than the diesel locomotive (Saunders, 2003). Kenefick commented on the impact of the Staggers Act: "In the days before deregulation, about the only thing the railroad could sell was service and a smile. Now service and a smile still count, but… the sweetest smile in the world won't count if your competitor is five cents under you" (Klein, 2011, p. 189). According to Kenefick, the Staggers Act also gave company ability to

say no to some business: "There was no more of this bullshit about the sugar and the sugar beets. You could say 'Look, buddy, unless you ship the sugar, don't look for us to haul the beets" (Klein, 2011, p.185).

Another factor that had affected railroad industry's profitability was the influence of its labor unions. While railroad unions had benefited railroad employees by negotiating higher salaries, they also meant that railroads tended to spend more on labor than the trucking industry. A train crew member's annual pay was $52,000, on average, while a unionized truck driver earned about $40,000 and a non-unionized truck owner made $32,000 (Klein, 2011).

Firemen on diesel trains would become a symbol of "unnecessary" labor that the unions had imposed on the railroads (Saunders, 2003). Before the introduction of the automatic stoker, firemen did hard physical work, moving coal into locomotive firebox (Stover, 1970). Even after the introduction of the stoker, firemen were used to monitor the fire and boiler controls (Stover, 1970). In the 1940s, General Motors showed that diesel locomotives could take the place of steam locomotives in hauling freight (UP, 2013c). Diesel locomotives where driven electrically: the diesel engine drove an alternator, which produced electricity that powered the electric motors mounted on the axles of the locomotive (UP, 2013c). The diesel locomotives dramatically improved efficiency and made possible a substantial savings in facilities and maintenance (UP, 2013c). In 1948, when the railroads were only about 20% dieselized, fuel costs constituted 8% of the revenue (Stover, 1970). In 1967, when dieselization was nearly universal, fuel costs were less than 4% of the revenue (Stover, 1970).

Two factors slowed Union Pacific's dieselization: shortages caused by World War II and the company's fleet of modern steam locomotives (UP, 2013c). The last steam engine ever built for Union Pacific was built in 1944 (UP, 2013b). On diesel locomotives, there was no fire to stoke (Stover, 1970). However, the fireman could still monitor controls and assist the engineer (UP, 2013d). Whether the firemen remained valuable to the railroad was controversial: unions argued that they improved railroad safety (United Press International, 1985). In 1959, less than 3% of locomotives on American railroads were steam (750 steam and 28,000 diesel locomotives) (Stover, 1970). In the same year 35,000 firemen and helpers remained on the job (Stover, 1970). By 1960s, the steam locomotive had been nearly completely replaced by diesel on the American railroad (National Park Service, 2002). In 1985, Union Pacific still employed 1,200 firemen, paying them about $60 million in total (Klein, 2011).

In August 1985, a presidential mediation board appointed by President Ronald Reagan recommended eliminating, by attrition, approximately 5,000 fireman jobs left nationwide (United Press International [UPI], 1985). The board concluded the fireman job to be "no longer be warranted or necessary for the safe and efficient operation of trains" (UPI, 1985). The board stated: "The board has concluded that the time is now, 26 years after the completion of the change from steam to diesel locomotives, to write the final chapter in what was described to be one of the longest, most studied and volatile labor disputes in the history of railroad collective bargaining" (UPI, 1985).

By 1989, Union Pacific seemed to refocus its interest away from subsidiaries back to the railroad. The company's CEO, Drew Lewis, stated: "We're in the railroad business, and in the railroad business to stay" (Klein, 2011, p. 284).

In 1995, its power lessened by Staggers Act and other deregulation legislation, ICC had been reduced to 300 employees from the height of more than 2,400 in the 1960s (Saunders, 2003). On December 1995, ICC was eliminated and a new Surface Transportation Board, under the Department of Transportation, took over (Saunders, 2003).

THE CRISIS

In 1996, Union Pacific was focused on pursuing a merger with Southern Pacific railroad, which would give UP control to all gateways to Mexico except El Paso (Klein, 2011). Union Pacific believed Mexico had a great growth potential for railroads, making this merger very significant for the company (Klein, 2011). In July 1996, the Surface Transportation Board approved the merger (Saunders, 2003).

The merger did not go smoothly. Congestion and computer glitches related to Southern Pacific's computer system's being different than that of Union Pacific resulted in lost cars and a multitude of dissatisfied customers (Klein, 2011). As one example, Union Pacific's computers lost track of 48 containers belonging to a cosmetics manufacturer, resulting in the cancellation of nearly all of this manufacturer's Christmas orders (O'Reilly, 1998). One Union Pacific employee commented: "We were a linear railroad prior to the SP merger… very simple… We were starting to become a very sophisticated network, and the SP just put us out of the stratosphere" (Klein, 2011, p.369). UP's workforce was stretched thin – crews were often called to work overtime (Saunders, 2003). At least one fatal railroad accident during this time may have been related to overworked employees falling asleep on the job (Saunders, 2003).

The crisis led Surface Transportation Board to hold emergency meetings (Klein, 2011). Several economists estimated that the congestion resulted in over $2 billion damage to United States' economy (O'Reilly, 1998). BNSF railroad, one of Union Pacific's major competitors, increased its business by the 10% that UP lost during the crisis (Klein, 2011). Some Union Pacific shippers filed lawsuits (Saunders, 2003). A survey conducted in December 1997 found that 30% of shippers who had diverted from Union Pacific during the crisis said they would never rely entirely on Union Pacific for all their shipping needs again (Saunders, 2003). Thirteen percent said they would never be Union Pacific's customers again (Saunders, 2003). Union Pacific's troubles became national news, and were even featured on "The Simpsons" (Saunders, 2003).

Many potential causes for the crisis were examined by the media. A Fortune article summarized, suggesting that perhaps Union Pacific failed to listen to Southern Pacific employees: "Computer problems. Bizarre labor rules. Inept federal regulators. Weather. Mexico. An intimidating CEO with subordinates reluctant to deliver bad news. Surging grain traffic. A booming petrochemical industry. But mostly the problem was arrogance. Union Pacific refused to accept suggestions from Southern Pacific employees who knew how to run their ailing railroad with chewing gum and baling wire" (O'Reilly, 1998).

According to Rob Richie of the Canadian Pacific Railroad, deregulation also contributed to the congestion railroads found themselves struggling with in the 1990s, as deregulation "created such a premium on eliminating excess cost [because] you could compete for the first time on the basis of efficiency" (Klein, 2011, p. 422). As the railroads were deregulated, competition lowered rates, pushing each railroad to acquire as much business as possible (Klein, 2011).

Indeed, growth of economy in the 1990s had increased congestion on all railroads (Klein, 2011). The 30% increase in demand that came during the decade was unexpected by railroads who had long suffered decreasing demand (Klein, 2011). The four major railroads remaining in the industry, including Union Pacific who announced plans in 1998 to spend 2.4 billion, realized they needed to increase spending in order to deal with the growing demand (Klein, 2011). Union Pacific made the conclusion that trying to run the railroad "too lean" employment-wise was a mistake (Saunders, 2003, p. 331).

RAILROAD REBORN

In 1999, Union Pacific's health rebounded, helped by the rapidly growing economy and the integration of its computer systems with Southern Pacific (Klein, 2011). Operating ratio fell to 82.1 from the 1998's abysmal 95.4 (Klein, 2011). An operating ratio consisted of operating expense as percentage of the railroad's operating revenue (United Transportation Union, 2012). It was considered to be one of the fundamental ways to measure railroad profitability – the lower the ratio, the better the performance (United Transportation Union, 2012).

Union Pacific sold Overnite in 2003 through an IPO (Material Handling and Logistics, 2003). The company first tried to sell Overnite in 1998, but ended up withdrawing the filing due to unfavorable market conditions (Material Handling and Logistics, 2003). Union Pacific said of the merger: "In November of 2003, Union Pacific again became a pure railroad with the sale of its trucking segment" (UP, 2003). The leaders of the company concluded that the synergies they'd hoped for in 1986 had not

appeared (Klein, 2011). Overnite had sometimes performed poorly relative to the railroad: in 1992, Overnite's operating ratio was 90.2, while the railroad's was 79.1 (Saunders, 2003). It was possible that inadequate leadership – Overnite was initially led by individuals who had little trucking experience – had contributed to the unit's problems (Klein, 2011).

In 2004, Union Pacific experienced another round of congestion (Phillips, 2004). According to Richard Davison, Union Pacific's CEO, the company struggled to accommodate the increased demand on its system: "We have more demand than supply. We're running like hell to try to keep up with volume, and our business is growing. We've had ten months of record volume. The gratifying part is the strength of the economy and the huge demand for our service. But the fact that we've disappointed a number of customers puts a little cold water on our euphoria. The lack of resources and qualified personnel has offset strong revenues, and we haven't put the results on the bottom line" (Klein, 2011, p. 421). Union Pacific hired and trained thousands of employees to better deal with the increased demand (Phillips, 2004). During the year, revenues went up by 664 million from 2003, but net income shrank by 981 million (UP: 2007 Annual Report, 2007). Meanwhile, the operating ratio increased from 81.5 to 89.4 (UP: 2007 Annual Report, 2007). One advantage of increased demand is that it made the industry's old enemy – trucking – far less of a threat. According to New York Times writing in 2004, the trucking industry would not have the capacity to take over "even a small part" of the Asian import trade that now moved by rails in United Sates (Phillips, 2004).

Dennis Duffy, head of Union's Pacific Operating department, realized that the industry has fundamentally changed (UP, 2010). He stated: "We came from a cost-control, low-return industry to a major growth industry, which to me is just accelerating. It's exhilarating… I have the utmost confidence that it's going to be the best time in this industry" (Klein, 2011, p.424). J. Michael Hemmer had served as Senior Vice President of Law and General Counsel for Union Pacific (Bloomberg Businessweek, n.d.) Hemmer remembered sitting in a bar in 1970s "speculating about whether there would be a railroad industry in 2000. We had serious doubts about that… Government regulation was too severe, labor conditions were intolerable. We were being required to operate services that didn't make any sense, we couldn't price to market, and many of us believed that the railroad industry would die" (Klein, 2011, p. 424).

UNION PACIFIC TODAY

2012 was the most profitable year Union Pacific had ever had: its operating revenue was $20.9 billion, 7% higher than in 2011 (UP, 2012). The net income was also a record $3.9 billion (UP, 2012). Moreover, it was the first year in which the company achieved an operating ratio below 70 percent: 67.8, a 2.9 point improvement from 2011 (UP, 2012). The company had 50,753 total track miles and 31,898 route miles, up from 9,473 in 1969 (Klein, 2011; UP, 2012). In that time, Union Pacific had changed its strategy from expansion into non-railroad subsidiaries to that of "a pure railroad" and had been completely transformed by technology (Klein, 2011). See Exhibit A for Union Pacific's selected financial data (operating revenue, net income, operating ratio and number of employees) for years 1991-2012. The railroad's business mix consisted of the following categories: Agricultural, Automotive, Chemicals, Coal, Industrial Products and Intermodal (UP, 2013f).

In 2012, agricultural products constituted 17% of Union Pacific's freight revenue (UP, 2013f). Union Pacific linked the midwestern and western grain producing areas to export terminals in Gulf coast and northwest ports, as well as Mexico (UP, 2013f). The company also served domestic grain processor, animal feed, and ethanol markets throughout the midwest, west, south, and Rocky Mountains (UP, 2013f). Union Pacific had an agreement with Ralex and CSX Transportation (a railroad located in the eastern states) to transport fresh produce from the west coast to the state of New York in a service called Produce Railexpress (UP, 2012; UP, n.d.b.). Express Lane was an expedited train service created with CSX Transportation to ship food products from California and Northwest to locations across the eastern half of the United States (UP, 2012; UP, n.d.a.).

Automotive products constituted 9% of Union Pacific's freight revenue (UP, 2013f). Union Pacific was the biggest auto transporter west of the Mississippi River, carrying both finished cars and auto parts (UP, 2012). About 70% of new vehicles were delivered by rail, and Union Pacific carried about 75% of this traffic in the western part of the country (UP, 2012). The company expected to see growth associated with Mexican car assembly production: an increase in northbound car shipments, as well in parts shipments traveling both north and south (UP, 2012).

In 2012, chemicals made up approximately 16% of Union Pacific's freight revenue (UP, 2013f). Chemical shipments included three general categories: Petrochemicals (industrial chemicals, plastics and petroleum products), fertilizer, and soda ash (UP, 2013f). About two-thirds of Company's chemicals business originated from or traveled to the chemical producing areas along the Gulf Coast (UP, 2013f). Bakken Shale formation in North Dakota and Permian and Eagle Ford shale formations in Texas were the primary sources of petroleum products (UP, 2013f).

Coal and petroleum coke shipments constituted 20% of the 2012 freight revenue (UP, 2013f). 74% of this traffic originated in the Southern Powder River Basin of Wyoming (UP, 2012). Another 14% originated in the Uinta Basin region of Colorado and Utah (UP, 2012). By using ports and interchange gateways, UP shipped coal to eastern US, Mexico, Europe, and Asia (UP, 2013f). Union Pacific provided rail-to-barge, rail-to-ocean vessel, and rail-to-lake cargo vessel transportation in addition to all-rail transportation (UP, n.d.c.). The company also worked with multiple rail-to-river barge transfer services on the Ohio and Mississippi rivers (UP, n.d.c.).

Shipments of industrial products made up 18% of freight revenue in 2012 (UP, 2013f). Industrial products included construction products, consumer goods, minerals, metals, lumber, paper, and miscellaneous products (UP, 2012). Volume of shipment of steel and construction products was driven primarily by commercial and highway construction (UP, 2013f). Drilling for gas and oil created demand for shipments of steel, pipes, frac sand and other drilling products (UP, 2013f). Demand by manufacturing, consumers, and housing builders generated the business for other industrial products (UP, 2013f).

Union Pacific's Intermodal business included the international and domestic shipping category and made up 20% of 2012 freight revenue (UP, 2013f). "Intermodal" meant involving the coordinated usage of two or more distinct modes of transport (US Postal Service Office of Inspector General, 2012). For example, a shipment could have been picked up at its starting location by truck, have traveled by rail for most of its journey, and then was once again taken to its final destination by truck (US Postal Service Office of Inspector General, 2012). Domestically, Union Pacific picked up and delivered containers and trailers for intermodal marketing companies and truckload carriers (UP, 2013f). International business involved delivering import or export container traffic that arrived and left through West Coast ports (UP, 2013f). See Exhibit B for Union Pacific's freight revenue by business category for years 2001 through 2012.

Demand for railroads was expected to grow both due to growth in the world economy and expanding US population (UP, 2011). In its 2010 10-K, Union Pacific wrote: "One clear opportunity comes from an expanding global economy and greater international demand for freight transportation, which already accounts for almost one third of UP's revenue base. The growing U.S. population alone is expected to increase freight demand 30 percent over the next 20 years and further crowd our highways. The Department of Transportation recognized that need when it set the goal of developing strategies to attract 50 percent of all shipments 500 miles or greater to intermodal rail. They see what we see every day – America needs more rail" (UP, 2011, p.3).

THE INTERVIEW, CONTINUED

Shawntell Kroese only took a few instants collect her thoughts in order to answer John's question: "I know Union Pacific has been doing very well recently, with record earnings and everything. I was wondering… Do you think you'll end up expanding into the trucking industry?"

Shawntell began to speak: "Well, I think…"

APPENDIX

EXHIBIT A
UNION PACIFIC, SELECTED FINANCIAL DATA (1991-2012)

	2012[a]	**2011**[a]	**2010**[a]	**2009**[a]	**2008**[a]	**2007**[b]
Operating revenues (millions)	20,926	19,557	16,965	14,143	17,970	16,283
Net income (millions)	3,943	3,292	2,780	1,890	2,335	1,855
Operating ratio (%)	67.8	70.7	70.6	76.1	77.4	79.3
Average employees (000)	45.9	44.9	42.9	43.5	48.2	50.1

	2006[b]	**2005**[b]	**2004**[b]	**2003**[b]	**2002**[c]	**2001**[c]
Operating revenues (millions)	15,578	13,578	12,215	11,551	12,491	11,973
Net income (millions)	1,606	1,026	604	1585	1,341	966
Operating ratio (%)	81.5	86.8	89.4	81.5	9	80.7
Average employees (000)	50.7	49.7	48.3	46.4	60.9	61.1

	2000[c]	**1999**[c]	**1998**[c]	**1997**[c]	**1996**[c]	**1995**[c]
Operating revenues (millions)	11,878	11,237	10,514	11,079	8,786	7,486
Net income (millions)	842	810	-633	432	904	946
Operating ratio (%)	82.3	82	95.4	87.4	79.1	78.1
Average employees (000)	61.8	64.2	65.1	65.6	54.8	49.5

	1994[c]	**1993**[c]	**1992**[d]	**1991**[d]
Operating revenues (millions)	6,492	6,002	5,773	5,687
Net income (millions)	546	530	456	-123
Operating ratio (%)	77.9	79.1	79	80.4
Average employees (000)	45.5	44	42.8	43.8

Sources:
a) Union Pacific. (2013). *Unites States Securities and Exchange Commission form 10-K*. Retrieved from http://www.up.com/investors/attachments/secfiling/2013/upc10k_020813.pdf
b) Union Pacific. (2007). *Annual Report*. Retrieved from http://www.up.com/investors/attachments/annuals/2007/annual_report.pdf
c) Union Pacific. (2002). *Annual Report*. Retrieved from http://www.up.com/investors/annuals/02annual/annual_report_02.pdf
d) Union Pacific. (2000). *Annual Report*. Retrieved from http://www.up.com/investors/annuals/00annual/tenyear.shtml

EXHIBIT B
UNION PACIFIC, FREIGHT REVENUE BY BUSINESS CATEGORY (2001-2012)

	2012[a]	**2011[a]**	**2010[a]**	**2009[b]**	**2008[b]**	**2007[b]**
Agricultural	17%	18%	19%	20%	19%	17%
Automotive	9%	8%	8%	6%	8%	9%
Chemicals	16%	15%	15%	16%	15%	15%
Coal (Energy before 2010)	20%	22%	22%	23%	22%	20%
Industrial	18%	17%	16%	16%	19%	20%
Intermodal	20%	19%	20%	19%	18%	19%
Total Freight Revenues (millions)	**19,686**	**18,508**	**16,069**	**13,373**	**17,118**	**15,486**

	2006[c]	**2005[c]**	**2002[d]**	**2001[d]**
Agricultural	16%	15%	14%	14%
Automotive	10%	10%	11%	11%
Chemicals	14%	14%	15%	15%
Coal (Energy before 2010)	20%	20%	22%	23%
Industrial	21%	22%	19%	19%
Intermodal	19%	19%	19%	18%
Total Freight Revenues (millions)	**14,862**	**12,957**	**10,663**	**10,391**

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UNION PACIFIC: THROUGH DEREGULATION & BEYOND – INSTRUCTORS' MANUAL

Synopsis

The case examines Union Pacific's history through deregulation of the railroad industry as it faced multiple crises and changed its strategic course. It paints a picture of an industry shaped by political and legal forces, national and global economies, population growth, geography and technology. Moreover, the case illustrates how these environmental forces intersected to define Union Pacific's competition with the trucking industry. It witnesses the transformational role played by technology. It also captures the industry's sometimes-adversarial relationship to its labor unions. This case sets the stage for the instructor to initiate a discussion on regulation and labor unions – two controversial but nonetheless very important topics influencing business decisions. The reader is asked to consider whether entering the trucking (again) is consistent with Union Pacific's current strategy and challenges.

Target Audience

The intended audiences of this case are students in undergraduate lower-level strategic management courses. This case immerses the reader in the history of Union Pacific and the entire railroad industry, as well as the forces which have made their mark on both. The case illustrates the complexity of strategic change and may serve as a dialogue-starter on a number of controversial subjects such as regulation and unionization.

Most introductory management/strategic management textbooks will cover the concepts needed to understand this case. Hitt, Ireland, and Hoskinsson's Strategic Management (2013, 10th edition) is one of the textbooks that could be used alongside the case. If this text is used, it is recommended that students cover, at the minimum, Chapter 2, especially "Segments of the General Environment" and "Industry Environment Analysis" sections (p. 34-68) and the Resources, Capabilities, and Core Competencies" section of Chapter 3 (p. 79-85) (Hitt et al., 2013).

Research Methodology

Data was gathered using books, websites, Union Pacific financial reports, and articles.

Learning Objectives

The following learning objectives may be used to guide this case:

- Identify the most significant strategic issues facing a company
- Understand why a firm's strategy is important in guiding firm choices and actions
- Appreciate the complexity and moral ambiguities involved in governmental regulation of businesses.
- Appreciate the complexity and moral ambiguities involved in unionization of businesses.
- Learn about the transformational role that technology can play across industries, including the railroad and trucking industries.

Discussion Questions

The following questions pertaining to the case may be used in class discussion and/or as an assignment:

1. Should Union Pacific expand into the trucking industry? Identify the company's strategy, sustainable competitive advantages and the most significant strategic issues facing the company in your answer.
2. Describe the positive and negative aspects of regulation in the railroad industry. Do you think the positive aspects outweighed the negative ones? Why or why not?
3. Describe the positive and negative aspects of labor unions in the railroad industry. Do you think the positive aspects outweighed the negative ones? Why or why not?

4. Technology has entirely transformed the railroad and trucking industry from its early days. What data from the case best illustrates how railroad efficiency has changed? Briefly research and describe any technology (after the introduction diesel locomotive) that had an impact on either the trucking or railroad industry (or both).

Theory Discussion

In addition to helping the instructor establish a dialogue on regulation and unions, this case may be used to practice identifying a company's strategy and its sustainable competitive advantages. Students should study sustainable competitive advantage prior to, or concurrently with, this case. The case could then be used to reinforce and practice the application of these theories. The majority of introductory management/strategic management textbooks, such as Hitt, Ireland, and Hoskinsson's Strategic Management (2013, 10th edition), cover the above theories and will thus work well with the case. If the Hitt et al. textbook is used, it is recommended that students cover, at the minimum, read the Chapter 2, especially "Segments of the General Environment" and "Industry Environment Analysis" sections (p. 34-68) and the Resources, Capabilities, and Core Competencies" section of Chapter 3 (p. 79-85) (Hitt et al., 2013). In particular, this case provides a good example of how influential the Political/Legal segment of the General Environment can be for an entire industry (see p. 46 in Hitt et al).

According to Hitt, Ireland, and Hoskinsson, a firm's capabilities are a result of a combination of a firm's tangible and intangible resources (Hitt et al., 2013). The authors note that intangible resources are "rooted deeply in the firm's history, accumulate over time, and are relatively difficult for competitors to analyze and imitate" (Hitt et al., 2013). Core competencies are capabilities that are valuable, rare, costly to imitate, and nonsubstitutable (Hitt et al., 2013). If a core competency is sufficiently costly to imitate and nonsubstitutable, it may constitute a sustainable competitive advantage (Hitt et al., 2013). A sustainable competitive advantage may enable the firm to create value as a virtue of competency for a relatively long period of time, depending on the degree of nonsubstitutability and the cost to imitate (Hitt et al., 2013). Companies that have competencies that are not sustainable are at risk of losing market share, profitability, or the entire firm to a competitor (Hitt et al., 2013).

Recommended materials: Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2013). *Strategic management: competitiveness and globalization: concepts and cases.* Cincinnati, Ohio: South-Western Centgage Learning.

Discussion Questions with Answers

1. *Should Union Pacific expand into the trucking industry? Identify the company's strategy, sustainable competitive advantages and the most significant strategic issues facing the company in your answer.*

Union Pacific's strategy is now focused on growing its railroad business. As mentioned in the case, this was not always so. In the 1970s, facing grim prospects in railroading, the company had shifted its strategy outside railroading, other than using the railroad as a "cash cow." However, in the 1990s and 2000s railroading has gotten more profitable. In fact, the company has struggled repeatedly with too much demand, resulting in congestion on the rails and dissatisfied customers. As stated in the case, demand for railroads is projected to grow 30% over the next 20 years due to US population growth alone.

Union Pacific appears a number of capabilities that sustain its competitive advantage: ownership of unique railroad routes and equipment, customer service (based on speed and accuracy of delivery), customer relationships and contracts and railroad-specific experience and knowledge (embodied by employees). I believe that the most significant strategic issues facing the company involve protecting and growing these capabilities.

Perhaps the most significant strategic issue will be dealing with growing demand without a return of the congestion issues that damaged Union Pacific's customer service and relationship in the mid 1990s and 2000s. Due to the opportunities Union Pacific has to grow and profit in its own industry, the need to grow and protect its customer relationships, and its past unsuccessful experience into trucking with Overnite, I believe that the best move for Union Pacific is NOT to expand into the trucking industry.

2. *Describe the positive and negative aspects of regulation in the railroad industry. Do you think the positive aspects outweighed the negative ones? Why or why not?*

Positives:

- Ensured predictable and consistent rate schedule for shippers
- Helped the economy by maintaining lower average rates for shippers
- Railroad shippers included farmers, who were able to control their prices and thus benefit society with more affordable food
- Ensured that railroads did not develop into a monopoly
- Prevented price fixing and collusion by the railroad companies

Negatives:

- Made the railroad industry less competitive than the trucking industry due to inflexible rates
- Decreased the speed to which railroads were able to react and adjust to customer preferences
- Prevented abandonment of unprofitable areas and services
- Upon deregulation, introduced turbulence as railroads had to relearn to compete based on price of service, rather than service alone

On the whole, the negative aspects of regulation as it was done in the railroad industry outweighed the positives. It seems that what damaged the railroad industry the most was the fact that the trucking industry's infrastructure was primarily funded by taxpayer dollars. At the same time as trucking became more prevalent, regulation made the railroads less able to react to the oncoming competition. Some regulation may have been necessary to prevent abuses and collusion by the railroads but the way and the extent to which that regulation was enacted ultimately proved ineffective and necessitated deregulation.

3. *Describe the positive and negative aspects of labor unions in the railroad industry. Do you think the positive aspects outweighed the negative ones? Why or why not?*

Positives:

- Helped protect the safety of employees working in a potentially hazardous industry
- Helped shield railroad employees from being overworked – this also protected the safety of the public
- Advocated for the advancement railroad safety over pure profit motive
- Ensured adequate remuneration and benefits for railroad employees

Negatives:

- Raised the railroads' operating costs
- Protected employee interests to the point of defending outdated and unnecessary practices

It is likely that the unions may have played a part in making the railroad industry less profitable. However, it is also likely that the unions increased employee safety and made the railroads more attractive places to work through their efforts. The issue of unions is a complex and controversial one. Although I am leaning towards the unions having become a bit "overzealous" with trying to retain jobs for their outdated firemen, I am not certain if union negatives truly outweighed their positives. Both unions and railroad companies have a goal in common: they both want the railroad companies to succeed and thrive. The experience of Union Pacific and other railroads illustrates how complex morally the relationship between a company and its union can become (despite a common goal). I think there many lessons to be learned – for both unions and the railroads – in what Union Pacific and other companies experienced in the 20th century.

4. *Technology has entirely transformed the railroad and trucking industry from its early days. What data from the case best illustrates how railroad efficiency has changed? Briefly research and describe any technology (after the introduction diesel locomotive) that had an impact on either the trucking or railroad industry (or both).*

The data from the case that most dramatically illustrates the influence of technology are the "ton-miles per employee" data from Table 1 of the case. In 1900, railroads only achieved 138,500 ton-miles per employee. In 1970, it was 1,351,590 ton-miles per employee. By 1998, an astounding 7,450,549 ton-miles per employee had been achieved. Some of the gain may have been due to factors other than technology. However, reading through the history of railroads shows that the diesel locomotive and the computer dramatically transformed the industry and its ability to be efficient.

One of the most important trends in railroading technology since the introduction of the diesel locomotive has been the gradual shift to AC motors from the DC generator (Klein, 2011). According to Union Pacific, "the introduction of alternating current technology (AC) to modern diesel-electric locomotives is expected to be as significant as the conversion from steam to diesel for railroad economics" (Union Pacific, n.d.). By Dec 1998, UP had 1,145 AC powered locomotives, 16% of its total fleet, which at that time was three times the number of that that BNSF or CSX (Klein, 2011). Since 2005, Union Pacific bought only AC-powered locomotives (Joiner, 2010). The AC locomotives are tougher, easier to control, and less expensive to build and maintain (Joiner, 2010; Railway Technical Web Pages, 2013).

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