

Filozofická fakulta Univerzity Palackého v Olomouci
Katedra anglistiky a amerikanistiky

**Ford and Škoda Auto
Success Based on Tradition**

(bakalářská práce)

Autorka: Šárka Voborová, Angličtina se zaměřením na aplikovanou ekonomii

Vedoucí práce: Joseph Ference, J.D.

Olomouc, 2010

I declare that I worked on this thesis independently and that I included the absolute list of used and cited literature.

In Olomouc

Signature

I would like to thank my thesis supervisor, Dr. Joseph Ference, for his guidance and help throughout this thesis and also for his great support.

Acronyms Used

ALAM.....	Association of Licensed Automobile Manufacturers
AR.....	Annual report
ASAP.....	Joint-stock Company for Automotive Industry
AZNP.....	Automotive Works, National Company
BMW.....	Bayerische Motoren Werke
CEO.....	Chief executive officer
GM.....	General Motors
ISO.....	International Organization for Standardization
L&K.....	Laurin and Klement Car Factory
SUV.....	Sport utility vehicle
UAW.....	United Auto Workers
VW.....	Volkswagen

The Chicago style of citation is used in this thesis.

Table of Contents

1. Introduction.....	1
1.1 Thesis Sentence.....	5
1.2 Methodology.....	8
2. Historical Development of Ford and Škoda Auto.....	9
2.1 History of Ford Motor Company.....	9
2.2 History of Škoda Auto.....	16
3. Secrets of Success.....	23
3.1 Ford's Secrets of Success.....	23
3.1.1 Henry Ford.....	23
3.1.2 Ford's Rules of Productive Labour.....	26
3.1.3 The Model T – A Universal Car.....	29
3.1.4 Ford's Problems.....	31
3.2 Škoda Auto's Secrets of Success.....	36
3.2.1 Laurin and Klement – the Perfect Match.....	36
3.2.2 The Hrdlička Family.....	38
3.2.3 Merger of Škoda and Volkswagen.....	41
3.2.4 Škoda's Problems.....	44
4. Recent Development and Prospects.....	46
4.1 Ford Motor Company.....	46
4.2 Škoda Auto.....	49
5. Conclusion.....	52
Annexe.....	57
Ford Motor Company Time Line.....	57
Škoda Auto Time Line.....	58
Shrnutí.....	59
Annotation.....	62
Anotace.....	63
Bibliography.....	64

1. Introduction

According to Datamonitor, a company providing information and analyses of various industries,¹ the automotive industry belongs to those businesses which have been significantly hit by the current financial recession.² Automotive producers are facing fierce competition in markets all over the world. The most affected market is the USA, where car sales dropped dramatically and two of the three biggest car manufacturers, General Motors and Chrysler, remained in business only thanks to the direct US government bail-out.³ *Trouble down the road* writes that the European market, being of a corresponding size to the American, sustained its position only thanks to the car scrap subsidy schemes introduced by some countries. Car producers are facing hard times now and their only chance to survive is to:

1. Restructure because of problems with company fragmentation due to a high number of brands and also overcapacity. According to the calculations introduced in 2009, the overcapacity in Europe would reach approximately 7 million units. In America it would reach 3.5 million units which would be a decrease of 2.5 million units.
2. Transform production to new, smaller models which are fuel-efficient. Firstly, people will prefer smaller vehicles because it will not be so easy to take out loans to buy the expensive ones. Secondly, our ageing population favours smaller cars. Finally, the need of reducing pollution by vehicles makes car manufactures and users produce and purchase environmental friendly cars.
3. Establish a good position in emerging markets like China, Brazil and India where a significant growth is expected.⁴

Kerles points out that there are over 900 million vehicles in the world.⁵ Datamonitor states that the volume of the global new car market decreased by 5.3% to 40 million units in 2009 and the global new car market value fell by 5.5% to US\$ 934 billion.

¹ Research Store, "Global New Cars," Datamonitor, 2009, 2, http://www.datamonitor.com/store/Product/global_new_cars?productid=976EBAA2-AC4D-413A-AE2B-1A4728D694A1.

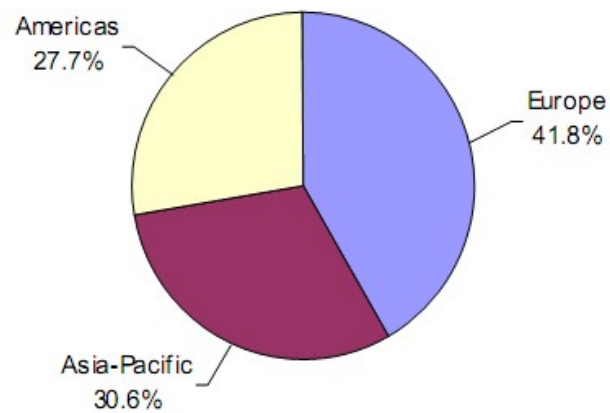
² Ibid., 8.

³ Ibid., 15.

⁴ "Trouble Down the Road," *The Economist*, September 17, 2010, <http://www.economist.com/node/14455669>.

⁵ Marek Kerles, "V Česku jsou čtyři miliony aut," *Zpravodajský server Lidových novin*, July 13, 2007, http://www.lidovky.cz/tiskni.asp?r=moje-penize&c=A070713_153024_ln_ekonomika_hlm.

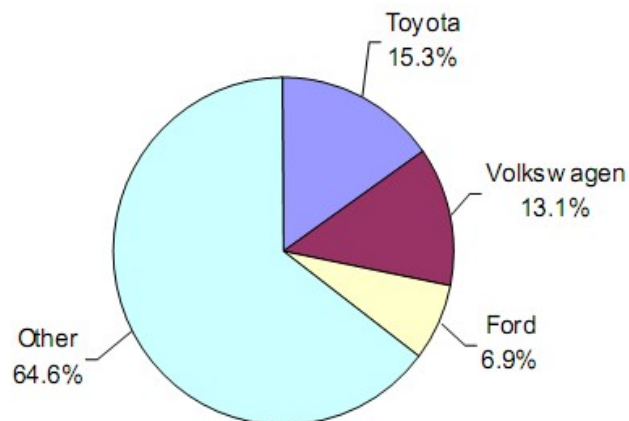
The value is divided into three areas and its market share is divided between the main car producers as follows:⁶



Source: Datamonitor

DATAMONITOR

Illustrace 1: Global New Cars Market Segmentation: %Share, by Value, 2009 (Source: Global New Cars 2009, 11)



Source: Datamonitor

DATAMONITOR

Illustrace 2: Global New Cars Market Share: %Share, by Value, 2009 (Source: Global New Cars 2009, 12)

The website of Discovery Channel relating to cars describes their early development. The history of the automobile dates back to 1769, when Nicolas Cugnot developed a vehicle propelled by steam to pull military weapons by transforming “the

⁶ Global New Cars 2009, 9-12.

action of a steam piston into rotary motion.”⁷ His idea was improved on in Great Britain, where the first horseless carriages drove people.⁸ In 1865, The Locomotive Act introduced speed restrictions for horseless vehicles in Great Britain. The act also decided that there were at least three people for each vehicle. Two could sit in the vehicle and one who walked ahead and had to wave a red flag.⁹ The first vehicles which started the period of modern motor cars were developed approximately at the same time in 1886 by two engineers, Gottlieb Daimler and Karl Benz, who worked in different parts of Germany.¹⁰

This thesis concentrates on two car manufacturers, the American Ford Motor Company and the Czech Škoda Auto.

Hyundai Passes Ford As World's Fourth Largest Automaker writes that Ford Motor Company is the fifth biggest car manufacturer in the world.¹¹

According to *Company Spotlight: Ford Motor Company*, the company is based in Dearborn, Michigan and does business in two sections, automotive and financial.

The automotive business comprises the design and development, production, sale and service of cars, trucks and automotive accessories. It sells its vehicles through the Ford, Mercury and Lincoln brands. It also offers customer services such as maintenance and minor or major repairs by its companies Genuine Ford and Lincoln-Mercury Parts and Service and Motorcraft.

The financial business is conducted through the Ford Motor Credit Company and includes financing through instalment selling and leasing not only for customers but also for dealers. It offers insurance services too.¹²

According to Ford's annual report, the company earned the revenue of US\$ 118,308 million in 2009.¹³ As stated on the company's official website, Ford's stock is not only traded on the New York Stock Exchange but on other stock exchanges too.¹⁴

Ford's structure is described in company's ARs as follows. The company is

⁷ Cars – History of Cars, “History of Cars Time Line,” Discovery Channel, 1769, <http://www.yourdiscovery.com/cars/timeline/> .

⁸ Ibid., 1801.

⁹ Ibid., 1865.

¹⁰ Ibid., 1886.

¹¹ “Hyundai Passes Ford As World's Fourth Largest Automaker,” *U.S. News & World Report, Ranking & Reviews*, August 19, 2009, <http://usnews.rankingsandreviews.com/cars-trucks/daily-news/090819-Hyundai-Passes-Ford-As-World-s-Fourth-Largest-Automaker/> .

¹² “Company Spotlight: Ford Motor Company,” *MarketWatch: Global Round-up* vol. 8, no. 10 (2009), 13-14, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=44651074&site=ehost-live> .

¹³ About Ford, “*Annual Reports - 2009 Annual Report*,” Ford Motor Company, Operating Highlights, <http://www.ford.com/microsites/annual-reports> .

¹⁴ About Ford, “Stock Exchange Listings,” Ford Motor Company, <http://www.ford.com/about-ford/investor-relations/investment-information/stock-issues-exchange-listings> .

managed through the Board of Directors which has 12 members. Each member is involved in at least one of five committees which deal with audit, compensation, sustainability, finance, and nominating and governance.

The Executive Officer Group consists of 37 members, each of them is responsible for different area of Ford's businesses.¹⁵

Ford vehicles are produced and distributed in more than 200 countries worldwide.¹⁶ It employs 213,000 people and has 90 factories all around the world.¹⁷

As stated in Škoda Auto's ARs, the Škoda Auto Group belongs between the biggest corporate groups in the Czech Republic. Since 2007, the owner of the company has been Volkswagen International Finance N.V. (a company wholly controlled by VOLKSWAGEN AG).

Škoda comprises the parent company ŠKODA AUTO a.s. and its subsidiaries: ŠkodaAuto Deutschland GmbH, ŠKODA AUTO Slovensko, s.r.o., Skoda Auto Polska S.A., Skoda Auto India Private Ltd. and the affiliate OOO VOLKSWAGEN Rus.

Its main activities are the development, manufacture and sale of Škoda cars, their genuine parts, and the provision of repair and maintenance services.¹⁸ The company generated the revenue of CZK 188 billion in 2009.¹⁹

Škoda is managed according to the German model of corporate governance. Members of the Board of Directors represent the senior management team. They run the company and act in its name. The Supervisory Board oversees them. The only shareholder (VW) elects members of both bodies and then both Boards elect their Chairmen.

The Board of Directors has six members and each of them is responsible for one branch of business: commercial affairs, production and logistics, sales and marketing, human resources, technical development. The Chairman is responsible for compliance with customers' requirements and planning.²⁰

The Supervisory Board has nine members. Six of them are elected by the owner

¹⁵ About Ford, "Annual Reports - 2008 Annual Report," Ford Motor Company, 8, <http://www.ford.com/microsites/annual-reports> .

¹⁶ About Ford, "Annual Reports - 2006 Annual Report," Ford Motor Company, About the Company, <http://www.ford.com/microsites/annual-reports> .

¹⁷ 2008 AR, 1.

¹⁸ About Škoda – For Investors, "Annual Report 2008," Škoda Auto, 9, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx> .

¹⁹ About Škoda – For Investors, "Annual Report 2009," Škoda Auto, 20, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx> .

²⁰ About Škoda – For Investors, "Annual Report 2006," Škoda Auto, 10-11, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx> .

and three by the employees themselves.²¹

The company does business in over 100 markets worldwide.²² It is a main employer and the biggest exporter of the Czech Republic.²³

1.1 Thesis Sentence

According to Škoda's AR, there are only very few car manufacturers in the world which have a continuous tradition of more than one hundred years.²⁴ Ford Motor Company and Škoda Auto belong to this unique group. The aim of this thesis is to carefully trace and analyse the history of these two traditional car producers and to find the secrets of their success which enabled them to maintain their long existence in the motor industry. These secrets of success will probably help them to overcome the current unfavourable economic situation and so continue their tradition.

The first section of this thesis deals with the historical development and the significant events which made these car makers successful and famous.

The second section analyses the particular secrets of their success which helped the companies to firmly establish their existence in the motor industry and to become significant players in the automotive market. It is only natural that there were ups and downs during the growth of these companies. Therefore this part also mentions problems which appeared during the evolution of the two car makers and which had an impact on their future development.

The topics included in this part relating to Ford's secrets of success are:

1. Henry Ford, the person,
2. Ford's rules of productive labour,
3. The Model T – “*a universal car*.”²⁵

Henry Ford is one of the most famous people in history and belongs to the group of the most successful business people of all time. Drucker points out that Ford did not invent anything new, but he carefully studied the world around him and made various

²¹ Ibid., 14.

²² About Škoda – For Investors, “*Annual Report 2007*,” Škoda Auto, 9, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>.

²³ *AR 2008*, 11.

²⁴ About Škoda – For Investors, “*Annual Report 2003*,” Škoda Auto, 17, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>.

²⁵ Henry Ford and Samuel Crowther, *My Life and Work* (London: William Heinemann, Ltd., 1923), 65.

revolutionary improvements which he utilized for his vehicle production. He is said to be an innovator rather than inventor.²⁶ This part of the thesis explains his interest in engines, the early beginnings of his business and the lasting direct relationship between his family and the motor company.

Automotive mass-production was introduced to the world by Henry Ford. He is considered to be the inventor of the assembly line, but this is not the truth. As mentioned above, Drucker says that Ford just appropriately used and further developed the mechanism applied in the meatpacking industry.²⁷ According to Raff, as a result of implementing these manufacturing improvements, Ford could also afford to adequately financially motivate his employees, which raised the company's productivity even more.²⁸

At the beginning, cars were considered as a luxury. Wicks states that Henry Ford changed this fact and made his cars affordable for his employees and other middle-class people.²⁹ The Model T became the iconic car of its era and had a significant cultural impact not only on American society but the world in general.

Ford and Crowther describe one of the problems that affected Ford's public image. The Selden Patent Suit complicated Ford's activities in the company's beginnings. Its main aim was to get Ford Motor Company out of business but Henry Ford was able to turn the suit to his advantage and his cars and the company itself became even more popular.³⁰

The other problem that is mentioned in this paper is Henry Ford's publicly stated opinion about Jews. According to Ribuffo, Ford's aversion to Jewish bankers climaxed when his newspaper, The Dearborn Independent, published anti-Semitic views and beliefs. This affair belongs to the dark side of the company and caused many people to refuse to buy Ford products.³¹ The source for this part was Ribuffo's article solely, as it was the only reliable resource I was able to find.

²⁶ Peter F. Drucker, "Henry Ford: Success and Failure," *Harper's Magazine*, July 1947, 2, <http://www.harpers.org/archive/1947/07/0032978>.

²⁷ Ibid. 2.

²⁸ Daniel M. G. Raff, "Wage Determination Theory and the Five-Dollar Day at Ford," *The Journal of Economic History* vol. 48, no. 2 (1988), 398, Journal Storage Database, <http://www.jstor.org/stable/2121179>.

²⁹ Frank Wicks, "The Remarkable Henry Ford," *Mechanical Engineering* vol. 125, no. 5 (2003), 50, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9634150&site=ehost-live>.

³⁰ Ford and Crowther 1923, 60-63.

³¹ Leo P. Ribuffo, "Henry Ford and "The International Jew," *American Jewish History* vol. 69, no. 4 (1980), 437-477, http://books.google.cz/books?id=5Ao_Pk5htcIC&pg=PA437&lpg=PA437&dq=ribuffo+henry+ford+and+the+international+jew&source=bl&ots=NhSSw39XuE&sig=mgWmYlf2Hr63Vc9Nw77fC7u1T6k&hl=cs&ei=1TBITOTBGcPQ4wbk3bnNDA&sa=X&oi=book_result&ct=result&resnum=3&ved=0CCMQ6AEwAg#v=onepage&q=ribuffo%20henry%20ford%20and%20the%20international%20jew&f=false.

The secrets of success of Škoda Auto introduced in this thesis are:

1. The personalities of its two founders, Laurin and Klement,
2. The connection with the Hrdlička family,
3. The merger with Volkswagen.

Kožíšek and Králík write in the books on Škoda history about two bicycle enthusiasts, Laurin and Klement, who built a solid foundation for the future car factory. This part describes their lives and the early beginnings of Škoda. It also explains the unique combination of the two personalities³² who were determined to do only the best for their company in order to ensure its future, even though it meant losing control of it.³³

These two authors also write about two generations of the Hrdlička family who worked for Škoda and their lives were linked with the company's important events. They were responsible for projects which significantly affected Škoda's operations.³⁴

Kožíšek and Králík and Bohatá provide the facts about the times of economic and political transformation after the fall of Communism in Czechoslovakia, when Škoda was able to survive only thanks to the German investor, Volkswagen. The negotiations were not always simple. Finally, the right partner for Škoda was found and helped the traditional Czech car producer to become more competitive in the newly-opened Western markets and break into automotive markets all over the world.³⁵

The problem which significantly restricted the development of Škoda was caused by the political situation in Czechoslovakia resulting from the Communist regime. The idea of the centrally planned economy imposed constraints which slowed down the company's development and prevented it from becoming one of the major European car producers as it had been before WWII. The information for this part was gathered up from the second volume of the book by Kožíšek and Králík.³⁶

The third and last section of this thesis analyses the recent development and future prospects of these two car producers in the global market. The source for this section are mostly companies' ARs.

³² Petr Kožíšek and Jan Králík, *L&K-Škoda 1895-1995, 1. díl* (Prague: Motorpress, spol. s r. o., 1995a), 8-13.

³³ Petr Kožíšek and Jan Králík, *L&K-Škoda: 1895-1995, Part Two, The Flight of the Winged Arrow* (Prague: Motorpress, spol. s r. o., 1995b), 65.

³⁴ Kožíšek and Králík 1995b.

³⁵ Kožíšek and Králík 1995b, 185-189; Marie Bohatá, "Škoda Automobilová a.s.," *Eastern European Economics* vol. 36, no. 5 (1998), 26-42, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=1847940&site=ehost-live>.

³⁶ Kožíšek and Králík 1995b.

1.2 Methodology

In order to be able to do a thorough analysis of Ford Motor Company and Škoda Auto, it was first necessary to carry out a literature search for information relevant to this topic. The information concerning Ford was obtained mainly from Henry Ford's biography, the company's official website, ARs and other internet sources, academic journals (accessible through the library databases of Palacký University), magazines and newspaper articles relating to the topic of the motor industry.

The information about Škoda was mostly obtained from books on the company history, the company's official website and ARs.

The Chicago style of citation is used in this thesis.

2. Historical Development of Ford and Škoda Auto

2.1 History of Ford Motor Company

The first part of the first section analyses the historical development of Ford Motor Company and points out the important events which made this company one of the best-known car producers in the world.

Ford and Crowther describe the early beginnings of the carmaker. Ford Motor Company was established in Detroit, Michigan, in 1903 by Henry Ford. He had had experience in a car-making shop, but he had not agreed with his partners' policy – to sell cars for the highest possible price with no interest in improving manufacturing methods or building any relationship with the car's owner. This was the opposite of what he wanted to do. So he left and established a new company. Henry was able to establish it only thanks to the fame of his racing car called 999, which had shown that he was able to build fast reliable vehicles and that the public should start to take the new motor industry seriously.

In the newly established shop, he became a “*vice-president, designer, master mechanic, superintendent, and general manager*.”³⁷ He possessed a 25.5% stake, but he did not like the idea of being under the control of someone else and therefore gradually increased it. Finally, in 1919, he owned the whole company together with his son Edsel. All company investments were solely financed by its earnings, which was the financial strategy Henry always tried to carry out.

Although Henry had in his mind ideas for various modern production methods, there was no machinery in his shop simply because there were no financial resources. The entire car was made by his own designs but by different manufacturers. The shop was only a place for assembling parts. Henry knew that the best (and the most economical) way of manufacturing would be that in which the whole article would not be made in one place. The better way would be to have every component made where it was best and then assemble them into a final product. As its first vehicle, the company introduced the Model A and sold over 1,700 of them in the first year of production.³⁸

The website on Company Histories writes that the business prospered and the

³⁷ Ford and Crowther 1923, 51.

³⁸ Ibid., 50-54.

factory was moved to a larger plant the following year.³⁹ Ford and Crowther state that the cars proved their reliability and acquired a good reputation. They were tough, simple and well made. Ford was offering three models in the second year (called by different letters of the alphabet). The company had to raise prices and, as a result, sold a fewer cars than in the previous year.⁴⁰ In addition, the website on Company Histories also introduces Henry's opinion on the company's business strategy, which combined the idea of receiving lower profit from each car sold and producing in bulk. This should lead to receiving a greater share of the market and also continuous profitability.⁴¹ Ford and Crowther write that a new plant was built in 1906 and new manufacturing machines were purchased. Although the company was still mainly an assembly workshop, it also started to make some components.⁴²

The Company Histories website explains that the market failure of the luxurious Model K illustrated the need to make cars which the public could afford.⁴³ According to Ford and Crowther, a new production strategy showed that these were small cars which were basically produced on the same platform, but were quite different in design. It was a good move, as the company increased its sales five times. Cars started to be sold in Europe too. The first complication appeared when Ford was sued for illegal usage of an engine patent by the Association of Licensed Automobile Manufacturers. The main aim of the lawsuit was to get Ford out of the automotive business but, in fact, it helped the company to increase its sales and receive public support.

After experimenting and making improvements, Henry introduced new production methods and thanks to them a new model could be launched. The so-called universal car became the Model T, which was presented in 1908 and became one of the most successful and well-known cars in the world. In the company's first year of production there were 311 employees, 1,078 cars were built, and it had one showroom. Five years later, it employed 1,908 people, manufactured 6,181 vehicles and had 14 showrooms.⁴⁴

When the sales surpassed 10,000 cars a year, the company invested in a new factory. It was located at Highland Park, near Detroit. New machinery was purchased which lowered the costs and increased the quality of the products. After a short period of

³⁹ Company Histories, "Ford Motor Company," Funding Universe, Origins of an American Legend, <http://www.fundinguniverse.com/company-histories/Ford-Motor-Company-Company-History.html>.

⁴⁰ Ford and Crowther 1923, 56-57.

⁴¹ Company Histories, Origins of an American Legend.

⁴² Ford and Crowther 1923, 58.

⁴³ Company Histories, Origins of an American Legend.

⁴⁴ Ford and Crowther 1923, 58-71.

increased prices, the company started their continuous reduction.⁴⁵ Ford's AR states that the assembly line was introduced in 1913.⁴⁶

In the words of Raff, Henry Ford became an internationally famous person in 1914 when he announced a new scheme of remuneration for Ford workers. The expanding plant needed new workmen in order to keep up with the high demand for the Model T. Therefore Henry Ford decided to reduce working time to eight hours a day (from the previous nine hours) and to pay a supplement to almost all employees so that their wages reached a minimum of 5 dollars a day. This doubled the wage for the majority of employees at that time. As a result, many people looking for work came to Ford and applied for jobs. The new system succeeded immediately and productivity significantly improved.⁴⁷ Ford was the only one in the motor industry to pay exceptionally high wages because he was the only one who used the production methods which allowed this measure.⁴⁸

The website on Company Histories writes that when the USA became involved in WWI, Ford provided its resources to the government. Vehicles, air plane engines, tanks and munition were produced at the factories.⁴⁹

Wicks points out that in 1918, Henry Ford decided to retire officially from the factory. His son Edsel (25) was appointed to the position of company president and received a controlling share. However, Henry did not stay in seclusion.⁵⁰ The Company Histories website goes in detail. Henry was very interested in developing a farm tractor called the Fordson which replaced workhorses. He also oversaw the controversial "Dearborn Independent" weekly newspaper and publicly offered his opinions on business and political affairs. Edsel, on the contrary, preferred to occupy himself with the tasks concerning ordinary operations.

Henry and Edsel decided to build a new plant at River Rouge near Detroit but their business partners were against this idea. The problem was solved by buying out all the other shareholders and the company became re-registered in 1919. By the mid-1920s, the River Rouge manufacturing complex was processing its own materials, generating power and producing components for the Model T.⁵¹

⁴⁵ Ibid., 73-74.

⁴⁶ About Ford, "Annual Reports - 2002 Annual Report," Ford Motor Company, 9, <http://www.ford.com/microsites/annual-reports> .

⁴⁷ Raff 1988, 387-389.

⁴⁸ Ibid., 398.

⁴⁹ Company Histories, Origins of an American Legend.

⁵⁰ Wicks 2003, 54-55.

⁵¹ Company Histories, Origins of an American Legend.

According to Ford and Crowther, the manufacturer built the 5 millionth car in 1921.⁵² The website on Company Histories writes that in spite of this fact, the company faced serious financial problems. Many bankers, convinced that Ford would face bankruptcy, obligingly offered loans, on condition that Ford would agree to be under their control. Neither Henry nor Edsel could accept such terms. Henry started to act. He delivered the cars to his sales dealers who had to pay in cash. Then Ford bought the local railway, the main source of the company's supplies and its transportation, and reduced the time needed for delivery and so cut inventories. Ford generated enough money to pay off the debts. Since this time, in the relationship with financial institutions, Ford was always a depositor.⁵³ Ford and Crowther also write that Ford always kept large sums in cash.⁵⁴

According to its AR, Ford purchased the Lincoln Motor Company in 1922, which produced luxury cars.⁵⁵ The Company Histories website writes that Edsel was also interested in the aircraft industry and purchased a company which later produced passenger air planes. Production of the Model T was ended in 1926 after its sales dropped sharply when Ford's main competitor, General Motors, presented its Chevrolet.⁵⁶ As Wicks notes, Ford decided to re-gain its market position with a new car, the Model A.⁵⁷

The website on Company Histories writes that the new Model A was presented in 1927 and became another success. Ford also founded Ford of Britain and later German Ford. It also supported a business relationship with the Soviet Union through establishing its factory there.

The Great Depression which began in 1929 forced many companies into bankruptcy. Despite great losses, Ford managed to stay in business. When the economic conditions became even more difficult, the company had to reduce wages to 4 dollars a day. Only the income from sales of the Model A kept the company afloat. When Ford's suppliers cut off their supplies because of tight money, Edsel decided to lend financial resources to banks and thus to the suppliers. But these efforts failed and Ford lost a huge amount of money. The economic recovery was slow and demanding.⁵⁸ Wicks points out that even in these hard times Ford continued to innovate, introducing the breakthrough

⁵² Ford and Crowther 1923, 21.

⁵³ Company Histories, Cash-Strapped in the 1920s.

⁵⁴ Ford and Crowther 1923, 156.

⁵⁵ 2002 AR, 11.

⁵⁶ Company Histories, Cash-Strapped in the 1920s.

⁵⁷ Wicks 2003, 53.

⁵⁸ Company Histories, Cash-Strapped in the 1920s.

single casting V-8 engine block in 1932.⁵⁹

According to Fine, Henry Ford's attitude towards trade unions was negative.⁶⁰ Company Histories explains that Ford resisted recognition of any union organizations until President Roosevelt's New Deal made the situation more positive for the trade unions. In 1937, the United Automobile Workers, the trade union representing labourers in the motor industry, started to organize Ford employees. Ford officials, under public pressure, agreed to negotiate with the union representatives but, in the same year, several men distributing UAW leaflets at Ford gates were attacked, probably by the members of Ford's Security Office.⁶¹ The situation sharpened in 1941 when Ford workers were on strike. Henry was forced to accept union representation for the company and signed a contract which met workers' demands.⁶²

As stated in the AR, the Lincoln Division introduced the successful Mercury brand in 1938, the aim of which was to satisfy middle class customers and fill in the gap between cheap Fords and luxurious Lincolns.⁶³

According to the website on Company Histories, Henry Ford was against American involvement in the Second World War.⁶⁴ Wicks explains that he was forced to change his mind after the attack on the USA. The newly established Willow Run plant started its operation in 1942 and put all its resources at the disposal of the American government. This largest production plant of that time produced planes for the Allies' air forces.⁶⁵

The Company Histories website writes that Edsel Ford (49) died suddenly in 1943. He was the one who had become responsible for the majority of the company's wartime mobilization and showed better managerial skills than his father. Ageing Henry had to resume his duties again and became company president. He asked for the discharge of his grandson, Henry II, from the army in order to manage the company. His demand was accommodated and Henry started to prepare his grandson for the leadership of Ford.

Henry II was appointed to the position of company president in 1945, in the most difficult times. The company was not supported by state contracts any more, and began to lose financial resources. Not able to keep the company's money under control, Henry II

⁵⁹ Wicks 2003, 53.

⁶⁰ Sidney Fine, "The Ford Motor Company and the N. R. A.," *Business History Review* vol. 32, no. 4 (1958), 357, Journal Storage Database, <http://www.jstor.org/pss/3111659>.

⁶¹ Company Histories, Cash-Strapped in the 1920s.

⁶² Ibid., The War Years.

⁶³ 2002 AR, 12.

⁶⁴ Company Histories, The War Years.

⁶⁵ Wicks 2003, 51.

hired several managers (mostly ex-GM workers), who started the reconstruction of Ford's finances. After Henry Ford's death (83) in 1947, Henry II was able to fully carry out new recovery strategies. These included the establishment of Ford in foreign markets and strict compliance with a financial plan with high profit margins.

The company managed to overcome all its difficulties and stay in business, but was no longer considered as a pioneer and top leader of the motor industry. It was rather regarded a GM imitator. In order to prove its abilities, Ford introduced a new model, the Edsel, in 1958 which was intended for middle class customers.⁶⁶ According to Dicke, it became a fiasco and the company had to face great financial losses.⁶⁷

Wick points out that Ford went public in 1956⁶⁸ and the website on Company Histories describes the following period. During the 1960s Ford saw great changes in management. It was not easy for managers to do their jobs well and get on with Henry II at the same time. Ford purchased the Philco company, an American manufacturer of electronic devices in 1961.⁶⁹ The AR mentions that the Mustang sports car, introduced in 1964, became a great success.⁷⁰

According to the Company Histories website, the 1970s were a time of growth and strong profitability for Ford's European subsidiaries. According to the Clean Air Act of 1970, the company had to develop environmentally friendly vehicles. Henry II made changes in management in 1977, and introduced his brother William Clay Ford to the company. By this step he became very unpopular among shareholders, who accused him of professional misconduct and corruption. He stopped the development of another compact model, too, and thus it was impossible for the company to face Japanese competition. Overall, the company's sales decreased, and it lost its market share.

In order to regain its market position, Ford started to study Japanese production methods and industrial management. It also established a close cooperation with the manufacturer of Mazda cars and merged with it in 1979. Ford imported Japanese cars until it was able to introduce its own compact car. Several factories were closed during the company's restructuring. A new level of employee performance was established, which increased productivity.

⁶⁶ Company Histories, The War Years.

⁶⁷ Tom Dicke, review of the *Disaster in Dearborn: The Story of the Edsel*, by Thomas E. Bonsall, *Business History Review* vol. 77, no. 2 (summer 2003), 332, Journal Storage Database, <http://www.jstor.org/pss/30041160>.

⁶⁸ Wicks 2003, 54.

⁶⁹ Company Histories, The 1960s-70s.

⁷⁰ 2002 AR, 18.

Another very successful model, the Taurus, which was highly praised by critics and received several prizes, improved Ford's position on the market. As a result, Ford started buying back its shares. In 1986 Ford outdid its main rival, GM, in income for the first time since 1924.⁷¹

Its market share increased and Ford purchased several companies, which also diversified its activities in financial services. The purpose of this decision was to avoid problems connected with the cyclical nature of the automotive industry. Ford was very successful in these new branches as it raised its revenues and made further acquisitions.⁷² The AR mentions, that it bought Hertz Corporation, a car rental company, in 1987,⁷³ and a British car maker Jaguar in 1989.⁷⁴

The website on Company Histories writes that the situation changed in the early 1990s when the USA faced economic recession. Ford's sales plunged and the company suffered huge losses. In order to improve the situation, Ford concentrated on the truck and minivan market, which became the fastest growing car market. The company also went through restructuring to raise its efficiency and productivity. Ford's financial situation would have been much worse if it were not for its diversification.

In 1999, William Clay Ford, Jr., Henry Ford's great grandson, was appointed to the post of chairman, and hired a new president, Jacques Nasser, who decided to make major changes such as improving profitability by cutting costs, and implementing a new strategy based on putting more emphasis on younger customers. Ford increased its stake in Mazda in 1996 and purchased a Swedish car producer Volvo in 1999. By the end of the 1990s Ford Motor Company had made great advancement and ended the decade as the most profitable car manufacturer worldwide.⁷⁵

⁷¹ Company Histories, The 1960s-70s.

⁷² Ibid., Challenging Early 1990s.

⁷³ 2002 AR, 20.

⁷⁴ Ibid., 21.

⁷⁵ Company Histories, Challenging Early 1990s.

2.2 History of Škoda Auto

The second part of the first section deals with the historical development of Škoda Auto and provides important information which had a great impact on the development of the company.

According to the Škoda Auto AR, the beginning of the Škoda Auto Car Company dates back to the year 1895 when two young men, a bookseller, Václav Klement and an engineer, Václav Laurin, agreed to establish a factory for assembling bicycles in the town of Mladá Boleslav.⁷⁶

Kožíšek and Králík in the first volume of their book give details about the early beginnings. Laurin and Klement started their business in a small workshop in the outskirts. At the outset, there were only three workers and the two owners. A bicycle was a complicated machine at that time, assembled from many parts usually imported from abroad which required precise batch production. The company provided a two year guarantee on its products and a one year guarantee on tyres which was a rarity at that time. But where to find customers? This region was just an ordinary one and the people living there were not rich. When Klement had no money for wages, he had to take the finished bicycles straight to a pawnshop.

Later he came up with the marketing idea of instalment-payment selling which increased the demand for L&K products. He also wrote a handbook about bicycling and actively participated in the local bicycle club. The first bicycle models were called Slavia because this name identified their Czech origin and patriotism. In 1898 a new plant was built which allowed the broadening of the production plan and the provision of new bicycle models. It was a paradox that the company was able to obtain a loan only from a German bank.

After finishing the building, Klement set off for Paris motor show to get new ideas. He was enchanted by motorcycles there. The motorcycle aroused interest at home and could be easily transformed into motorcycles. Although cars became known at that time, the company had no experience with making them and there were only few customers rich enough to afford this novelty yet. Therefore producing motorcycles was the right choice.

In spring 1899, L&K broadened its range of products and offered the first imported motorcycle to the public. Both men realized the importance of technical development and

⁷⁶ AR 2003, 17.

decided to follow it.⁷⁷ They made necessary the adjustments and started to manufacture their own motorcycles the same year. The new motorcycle, presented on a race-track in Prague, was called again Slavia and different models were distinguished by letters of the alphabet.

But the domestic market finally did not look with favour upon the new machine. The reason was maybe conservatism, lack of finances or typical Czech disparagement of domestic products. Therefore Klement decided to find customers abroad. His sales journey to Germany was a success and after initial difficulties in Great Britain, where he had to teach a mechanic of an important car dealer to ride L&K motorcycle in 3 minutes, Klement made a good deal.⁷⁸

In 1905 the company ended its bicycle production. Motorcycle production continued until 1909 but the company's main goal changed in accordance with technical development. There were probably 3,946 motorcycles made altogether.

The first car, called the Voituretta (the French term for a cart), was presented in 1906. The demand was unbelievable. Stylish design and low price were exactly what people wanted.⁷⁹ There were 5 body styles of the car in the first year of its production. L&K was heading in the right direction.⁸⁰

The development of car production required financial resources. Both owners agreed to transform the company into a joint-stock company. They lost the privilege of managing the company on their own, but by this decision, showed that they could make the right compromises. Laurin & Klement, a joint-stock company, was established in 1907.

The factory flourished. The plant expanded, new machines were bought, new workers employed and dealers hired. Its family atmosphere and humble beginnings were a thing of the past. The production of cars continued and customers could choose from various models and body styles.⁸¹ Also medium and heavy commercial motor vehicles were offered, and L&K omnibuses provided the first Prague city transport.⁸² An air plane engine was built in the factory, but it was too early for the general public and the board of directors to accept this product and see its potential.⁸³

Klement's idea was the mass production of limited types of cars as it was in the

⁷⁷ Kožíšek and Králík 1995a, 13-18.

⁷⁸ Ibid., 20-22.

⁷⁹ Ibid., 48-50.

⁸⁰ Ibid., 52.

⁸¹ Ibid., 60-62.

⁸² Ibid., 64.

⁸³ Ibid., 73-74.

USA with the Ford's Model T. But the situation in the Central-European market required the opposite. People wanted to choose from a wide range of products and required tailor-made vehicles.⁸⁴ Therefore the Model S was introduced in 1911 which would satisfy all customers with only minor model modifications.⁸⁵ L&K vehicles could be found all over Europe and also in Mexico, Japan and Australia.⁸⁶

Then WWI began. The company immediately started military production in order to avoid the conscription of its workers. The factory was developing even during the war. Physical and chemical laboratories were established, the accounting department used machines for punched cards and a hydro-electric power station was built. These should have secured easy post-war return to the car production. It seemed that the factory was well prepared.

But pre-war markets were damaged and Czechoslovakia was not able to afford goods such as cars at that time because the postwar reconstruction was hard and expensive. Therefore the company's main product became a motor plough. Market recovery was signalled by the reintroduction of the previous model. A new company closely bound up with L&K, a garage and a show room, was set up in the “Waldstein Riding School” palace at Prague Castle. It represented another step towards the overall provision of car services.⁸⁷

But the company was not yet able to produce a small and cheap people's car which the post-war market required. Therefore the popular Model S was reworked and renamed to Model 100 (The change of the names of models from letters to numbers was probably only a marketing manoeuvre in order to arouse a sense of new production lines.) The company was slowly losing its position of a market leader and two other car producers, Praga and Tatra, became its major competitors.

The market situation had improved slightly by 1923 and company sales increased again.⁸⁸ At the request of the government, L&K started the production of air plane engines. But in 1924 a fire broke out in the plant and damaged some of its buildings. As a result of this accident, Klement decided to find a suitable business partner for the car company.

He knew that the factory needed financial resources to modernize its production. It needed a strong investor, and Akciová společnost, previously Škoda Works, suggested itself. It was one of the largest industrial companies in Central Europe and had its own

⁸⁴ Ibid., 76.

⁸⁵ Ibid., 86.

⁸⁶ Ibid., 95.

⁸⁷ Ibid., 98-109.

⁸⁸ Ibid., 112-113.

automobile department (President Masaryk used their luxurious model Škoda-Hispano Suiza.) Laurin & Klement and Akciová společnost merged in 1925. It was a marriage of convenience.⁸⁹

The following period of the car producer is described in the second volume of the book by Kožíšek and Králík. Karel Loevenstein, a general manager of Akciová společnost presented new directives whereby the Mladá Boleslav factory remained only a production plant and all business matters were dealt with in Prague. Laurin & Klement, joint-stock company, was deleted from the business register⁹⁰ A. Pavlůsek and O. Pavlůsek also mention that the trademark L&K-Škoda remained only on products developed until 1925. New cars were badged with the Škoda and L&K trademark for some time, then only under the Škoda brand.⁹¹

Kožíšek and Králík write that a new five-storey body assembly plant was started in 1928 and put under the supervision of the company's new employee, Karel Hrdlička. Standardization and unification enabled the cars to share components and so reduced the costs⁹² The company needed greater independence in order to work more efficiently. It was therefore transformed into a Joint-stock Company for Automotive Industry (Akciová společnost, automobilový podnik, ASAP), with its headquarters in Prague, in 1930. All shares were owned by the Pilsen Škoda Works. Karel Hrdlička became the new managing director.⁹³

As the world economic crisis during 1920s and 1930s came to Central Europe, new taxes were levied and car driving became more expensive. Sales decreased as a result of an anti-automotive law that established many unfavourable conditions for car owners. The government did not take into consideration that motorization was connected with employment and the self-defence capabilities of the Czech Republic. On the other hand, the distribution of vehicles rose in Germany by 94% at that time.

Domestic car producers fought against low demand and imported vehicles by adopting standardization. Škoda and Praga made an anti-competitive agreement whereby their production and sales would be coordinated by a common organization -Motor Company (1932). This would cut competition between the two brands and would reduce costs. This agreement should have lasted for decades. In fact, it was in existence only two

⁸⁹ Ibid., 119-124.

⁹⁰ Kožíšek and Králík 1995b, 13-15.

⁹¹ Alois Pavlůsek and Ondřej Pavlůsek, *Škoda: Laurin & Klement* (Brno: Computer Press, 2004), 56.

⁹² Kožíšek and Králík 1995b, 16-19.

⁹³ Ibid., 24.

months. The main reason for its demise was disagreement between the companies on their share of the profits.⁹⁴

By 1934 the car factory was able to introduce the people's car, Popular.⁹⁵ Its light weight and low price were what people wanted.⁹⁶ In order to reassure potential customers that the low price of the car did not mean lower quality, the company sponsored a traveller's trip to India⁹⁷ and participated in motor races.⁹⁸ The Popular was the best selling car in the country⁹⁹ and Škoda returned to the first place among car producers.¹⁰⁰

After the occupation of Czechoslovakia by the Third Reich, ASAP was reorganized. The entire Škoda concern was included in Reichswerke-Hermann-Göring in 1939. Many people had to leave the company, and cars and trucks were produced mostly for military purposes. A shop for the production of air plane wings and other components was established.¹⁰¹ A military tractor RSO, designed by Ferdinand Porsche, was built in the Mladá Boleslav plant but turned out to be absolutely useless as it was not able to drive in rough terrain.¹⁰²

On May 9th 1945, when the peace was already declared, the car factory was bombed by German air forces. The cleaning was put together immediately; some departments were moved or combined, and the first post-war car left the company in June. The post-war situation was much more convenient than it had been after WWI. Customers wanted vehicles, both at the domestic and foreign market. Before WWII, the Communists had no effect on the company activities and did not have any party organization in it. But everything was changed after the war. The majority of the members of the factory council were Communists.

In the autumn of 1945, the car factory (as well as the entire Škoda Works) was nationalized and was named Automotive Works, National Company (Automobilové závody, národní podnik, AZNP). The Škoda trademark remained on the cars because of its commercial value. AZNP went through a reorganization and the entire production and management was based on the centrally planned economy. It was decided by the

⁹⁴ Ibid., 30-33.

⁹⁵ Ibid., 38.

⁹⁶ Ibid., 36.

⁹⁷ Ibid., 40.

⁹⁸ Ibid., 58.

⁹⁹ Ibid., 40.

¹⁰⁰ Ibid., 46.

¹⁰¹ Ibid., 69-70.

¹⁰² Ibid., 73-74.

government that passenger cars would be manufactured only in Mladá Boleslav.¹⁰³ Several plants were included into the AZNP, as were the body plant in Vrchlabí¹⁰⁴ and the factory in Kvasiny.¹⁰⁵

The government supported car production as it was a useful way of receiving hard currency. The Party representatives ordered the company to manufacture a people's car which would be for everyone. Spartak was introduced in 1953 and was called “*a transitional People's car*.”¹⁰⁶ This means that it was not a car for everyone, but it was declared that the following model would be entirely for all the people.¹⁰⁷

The Communist Party decided to invest in the factory on condition that the awaited people's car would be a completely new model. The Ministry of General Machining also set down the features of the new vehicle.¹⁰⁸ The construction of a new plant started in 1960 and, 4 years later, the Mladá Boleslav car factory became a large industrial complex. The new Škoda 1000 MB was introduced in 1964 and was produced at a daily capacity of 600 cars.¹⁰⁹ Škodas were driven not only in socialist countries but all over the world. But from the beginning it was clear in the factory that just one model was not enough.¹¹⁰

In August 1969, when the entire factory went on vacation, a fire broke out there. It was probably caused by carelessness during the installation of a new assembly line. Fortunately the fire affected only one part of the factory and the production of the new facelift model was not delayed.¹¹¹

It was known in the factory that worldwide trends in the automotive industry had been different for a long time and that Škoda had to go towards them. This meant introducing the front-wheel drives and engines in the front. At the same time, in 1982, Party functionaries decided that a new car had to be built. But they had the rather naive idea that the development of the model had to be finished by June 1985 and begun manufactured by 1987. Automotive experts wondered at this idea. Even major car manufacturers needed 5 years just to the design and development of a new model and further time to put it into production. The only person willing and able to complete this

¹⁰³ Ibid., 80-83.

¹⁰⁴ Ibid., 89.

¹⁰⁵ Ibid., 91.

¹⁰⁶ Ibid., 101.

¹⁰⁷ Ibid., 101.

¹⁰⁸ Ibid., 116.

¹⁰⁹ Ibid., 123-124.

¹¹⁰ Ibid., 126.

¹¹¹ Ibid., 132.

task was Petr Hrdlička, son of the former ASAP managing director.¹¹² After many problems, he succeeded. The Favorit was presented in July 1987.¹¹³ It became the only vehicle produced in the Eastern Block which was not *“licensed from another country and which was both stylistically and technically comparable to western vehicles in its class.”*¹¹⁴

Although the Mladá Boleslav car factory was one of the nation's leading companies, it had to face problems with foreign competitors after the opening of western markets in 1989. Moreover the factory needed investment. Fortunately, its good position on the market and well developed production attracted many foreign investors.¹¹⁵ The Czech government finally chose the German motor company Volkswagen, and the merger took place in 1991. An agreement concerning the rights to use the Škoda trade mark was signed between Škoda Pilsen and the newly established Škoda Auto, a member of the VW group, in the same year.¹¹⁶

The first car made under Czech-German cooperation was the Felicia introduced in 1994.¹¹⁷ A. Pavlůsek and O. Pavlůsek add that within VW, Škoda became a maker of cheaper but comfortable and reliable cars intended for middle class families. In 1996 a new engine and production plant was built which raised capacity for the launch of another successful model, the Octavia.¹¹⁸ According to Škoda's AR, since that time the company has been able to offer a range of products and to become a serious competitor among other car producers.¹¹⁹

¹¹² Ibid., 154-156.

¹¹³ Ibid., 165.

¹¹⁴ Ibid., 181.

¹¹⁵ Ibid., 184-186.

¹¹⁶ Ibid., 188-189.

¹¹⁷ Ibid., 193.

¹¹⁸ A. Pavlůsek and O. Pavlůsek 2004, 189-190.

¹¹⁹ AR 2008, 44-45.

3. Secrets of Success

3.1 *Ford's Secrets of Success*

3.1.1 Henry Ford

The second section analyses the particular secrets of success of Ford and Škoda. Its first part relates to the Ford Motor Company. Henry Ford, his personality and early business attempts are discussed as the first secret of success and show whence his revolutionary ideas came. The lasting relationship between the Fords and the company is also mentioned here.

Ford and Crowther describe the early life and business beginnings of Henry Ford. He was born on July 30, 1863 in Dearborn, the suburb of Detroit, Michigan into a family of successful farmers. Henry was always interested in mechanics and since his early life, he recognized that there must be means to make hard work at a farm easier.

When he was 12, he saw a road engine for the first time. It captured his attention because it was the first vehicle he had seen which was not drawn by horses. This meeting affected his later life. The other event, which had impact on his life, happened when Henry got a watch. He was fascinated by this device and all parts inside it. When he was 13, he managed to put a watch together and by the time he was 15, he could do almost anything concerning watch repairing. He learned much just by fiddling with devices.

Although Henry's father was never much in favour of his son's interest in machines, he let him become an apprentice in a machine workshop. Henry had qualified to be a mechanic before the regular term finished. He liked fine work and therefore worked in a repair shop at a jeweller. At this time he nearly started his own watch manufacture as he could easily craft watches on his own. But he realized that goods like these were not a necessity and so people did not buy them. He was always conscious of basic trade rules. He also realized that if he wanted to produce anything cheaply he had to make it in bulk.

In 1879, he changed his job and started building and repairing road engines. What made him wonder was their weight and purchasing costs. He decided to construct his own engine. At first, he intended to make one which would do ploughing on farms. But he

found out that people were more interested in travelling on roads than using machines on farms. So he made a steam car, but later came to the conclusion that steam was not an appropriate means of power for light road vehicles.¹²⁰ Wicks writes that Henry, studying science magazines, came across a gas engine.¹²¹ Two years later he constructed an internal combustion engine and throughout his life created a business empire upon it.¹²²

Ford and Crowther mention that meanwhile Henry returned to the farm, got married and continued making experiments with engines. But he was offered a position at the Detroit Electric company as an engineer and mechanic and this enabled him to end the farm life he did not like much.¹²³

Henry Ford built his first gasoline car in 1895 and for a long time it was the only car in Detroit.¹²⁴ According to Wicks, the car was called Quadricycle because, in fact, it was “*a platform with a bicycle on each side.*”¹²⁵ Ford and Crowther explain that the car made trouble everywhere Ford went as it frightened horses and stopped traffic. Wherever he was, a crowd immediately formed around him. When he left it for a moment, there was always some curious person who tried to start it. In the end, he had to chain the vehicle whenever he left it. Although there were no speed limits at that time, he had to get special permission to drive his invention and so probably became the first licensed driver in America. He sold the car to get money for the construction of another one. He constructed three cars in his shop and always learned much from the previous one. They were very similar to those built in Europe at that time.

He still worked at the electric company and was promoted. But his experiments with gas engines were not popular with his superior who had no problems with conducting experiments but was not in favour of gas, which was quite understandable. However, usage of electricity was unsuitable for powering cars at that time. Henry was offered a promotion at the Edison Company provided that he stopped his engine making. So he decided to leave and started his car business in 1899.

He became a shareholder in Detroit Automobile Company and was appointed as chief engineer. The company continued making cars based on his earlier models. But he did not agree with the idea of making vehicles only for getting money. He wanted to

¹²⁰ Ford and Crowther 1923, 22-27.

¹²¹ Wicks 2003, 52.

¹²² Ibid., 50.

¹²³ Ford and Crowther 1923, 29-30.

¹²⁴ Ibid., 33.

¹²⁵ Wicks 2003, 52.

improve production methods and the cars themselves, and re-invest the profits. So he left the company.¹²⁶

Wicks explains that Henry had to submit to the idea of racing to become successful. He took part in a race, won and only then got the attention of people.¹²⁷ Ford and Crowther write that this enabled Henry to start his own business in a small shop in 1903, where he continued with his improvements and became his own master.¹²⁸

As Wicks points out, Henry was in charge of the Ford Motor Company until 1918 when he made his 25-year-old son Edsel the president. The Ford family gained total control over the company in 1919. A conflict with company shareholders preceded. Henry had refused to pay dividends to them because he preferred to invest the money back in the company. But the shareholders had successfully sued and Henry had had to pay them. He decided to buy the shares at the lowest price. So he perpetrated a hoax that he had been considering starting a new business in order to make a car more affordable than the Model T. The company stock value fell and Henry bought stock anonymously through representatives. Ford Motor Company was not traded in public until 1956.¹²⁹

According to the Company Histories website, Henry's son, Edsel, died in 1943 and Henry had to resume the presidency of the company again. His grandson, Henry II, was exempted from the army to manage the business.¹³⁰ Wicks writes that he was the company president between 1945 and 1977.¹³¹ The website on Company Histories states that his brother, William Clay, was involved in the business too.¹³² Finally, Ford's AR states that Henry Ford's great grandson, William Clay, Jr., has been the Chairman of the Board of Directors since 1999.¹³³

Henry Ford, through his great interest and devotion to the motor vehicles was able to laid solid foundation of the company. He had his ideas about company's future and was always determined to implement them, no matter what others thought. He strongly believed in his abilities and possibilities he could reach and this fact enabled him to become a significant person of the motor industry. His family still has a great responsibility to the company and its founder.

¹²⁶ Ford and Crowther 1923, 33-36.

¹²⁷ Wicks 2003, 53.

¹²⁸ Ford and Crowther 1923, 50-51.

¹²⁹ Wicks 2003, 53-54.

¹³⁰ Company Histories, The War Years.

¹³¹ Wicks 2003, 51.

¹³² Company Histories, The 1960s-70s.

¹³³ AR 2002, 26.

3.1.2 Ford's Rules of Productive Labour

The second of Ford's secrets of success is explained by Henry Ford's ideas concerning productivity which made his cars affordable for ordinary people.

Henry Ford came up with many interesting and, at that time, revolutionary ideas concerning labour and working conditions. Ford and Crowther write that the developments in production methods and materials were greater and much more important than the development of car designs.¹³⁴ Henry Ford's main idea was to make goods in bulk. Manufacturing according to customer's orders was the past.¹³⁵

In the early years of Ford, cars were simply put together at one spot on the shop floor and workers brought the needed parts to it. But it was found that employees spent most of their working time fetching components rather than mounting them. When individual parts began to be manufactured at Ford, usually one workman did all operations necessary for their production in a shop. When there were more people working on different tasks on one place, they usually got under each other's feet. The labour needed to be directed.

The basic principle was to take the work to the workers instead of workers to the work. As Henry Ford said, no man should have to take more than one step during his work. Therefore tools were put according to the sequence of operations and each part travelled the least distance possible. Conveyor belts were introduced so when a labourer completed his operation he always put the product in the same place. Sliding assembly lines brought and put parts at the most convenient places, and individual operations were divided into simpler ones. By implementation of these principles and keeping work in motion, the mental and physical activity of workers could be reduced and this accelerated the production rate. As Henry said, the perfect situation came when a worker did only one thing with only one movement.¹³⁶ Raff also points out that if there was a trouble on the assembly line it could be immediately seen. In order to meet any emergency, substitutes were always kept at hand.¹³⁷ According to the website about Henry Ford, the manufacturing methods used in Ford factories were based on the principles of the scientific management

¹³⁴ Ford and Crowther 1923, 21.

¹³⁵ Ibid., 47.

¹³⁶ Ibid., 79-81.

¹³⁷ Raff 1988, 394.

introduced by Frederick Taylor.¹³⁸

The first moving line was installed in 1913 for the production of the Model T. One year later, it lasted only 93 minutes to assemble one Model T.¹³⁹ Ford and Crowther explain that the more economical methods of production were introduced gradually. The speed of the conveyor and its position had to be carefully coordinated. People must not be hurried. On the other hand, every wasted second meant increased costs¹⁴⁰ Innovations and improvements were made instantly.¹⁴¹ The factories were divided into several departments. Each of them made only one single thing and in fact became a little factory within the large one.¹⁴² Individual departments did not know what the others were doing.¹⁴³

Ford declared that his factory needed only a minimum of skilled employees. Skills were put into planning, management and machines, which made work easy enough to be performed by any labourer.¹⁴⁴ Newcomers knew how to do their jobs in a few hours or a few days.¹⁴⁵

Times Needed for Training of Jobs at Ford (1919)¹⁴⁶	
The Number and Percentage Share of Jobs	Estimated Time to Master a Job
1,743 (43%)	1 day or less
1,461 (36%)	1 day to 1 week
251 (6%)	1 to 2 weeks
534 (14%)	1 month to 1 year
43 (1%)	1 to 6 years

According to Ford and Crowther, introduction of new, more economical, production methods enabled cars to be made at the high quality and sold as cheaply as possible.¹⁴⁷

The new methods were almost perfect and enabled production expansion.¹⁴⁸ On the other hand, Raff points out that there were problems with people who performed manual work. The demand for the Model T was high and the company was unable to manufacture

¹³⁸ Resources for Science Learning – The Case Files, “Henry Ford,” The Franklin Institute, Scientific Management, <http://www.fi.edu/learn/case-files/ford/index.html> .

¹³⁹ Ibid., 93 Minutes.

¹⁴⁰ Ford and Crowther 1923, 81-82.

¹⁴¹ Ibid., 17.

¹⁴² Ibid., 83.

¹⁴³ Ibid., 92.

¹⁴⁴ Ibid., 190.

¹⁴⁵ Ibid., 79.

¹⁴⁶ Raff 1988, 390.

¹⁴⁷ Ford and Crowther 1923, 48.

¹⁴⁸ Ibid., 71.

enough vehicles. Because of tough working conditions, Ford faced difficulties with recruiting new workers and more importantly had to solve the problem of a high work force turnover. In order to raise the labour supply and so meet the demand for cars and reduce the costs of taking on new workers and giving training to them, the company had to offer greater compensation for the work. Therefore Henry Ford announced the establishment of the Five-Dollar Day at Ford in 1914. This meant that the company would pay a supplement to all qualified employees which would raise their wages to a minimum of 5 dollars for an 8-hour day. This announcement made him one of the best known businessmen in the world and assured him even more workers than were needed. The new remuneration system encouraged otherwise restless workers to stay with the company.¹⁴⁹

Labour Data at Ford (1913-1915)¹⁵⁰			
Year	1913	1914	1915
Average Employment	13,623	12,115	18,028
Leavings	50,448	6,508	2,931
Turnover rate	370%	54%	16%

Ford and Crowther state that some tasks were so undemanding that handicapped people could do them.¹⁵¹ In the words of Wicks, Ford proclaimed that there were more jobs in his factories that could be done by the blind and the deaf than there were people with those handicaps.¹⁵²

According to the website about Henry Ford, by increasing wages, Ford also postponed the conflict with trade unions which he did not have a liking for.¹⁵³

Foote, Wheatley and Wright also write that a Sociological Department was established in Ford's factories. It investigated whether employees' private lives complied with the need for the high wage, and which helped immigrants to get used to their new home.¹⁵⁴ Ford was also willing to employ black workers, which was not usual in the northern states of the USA between 1918 and 1947. The company became the biggest employer of black automotive workers. Wages of black workers were identical to those of whites and black workers were often put in important positions, sometimes even

¹⁴⁹ Raff 1988, 387-389.

¹⁵⁰ Ibid., 389.

¹⁵¹ Ford and Crowther 1923, 108-109.

¹⁵² Wicks 2003, 50.

¹⁵³ Resources for Science Learning – The Case Files, Union Relations.

¹⁵⁴ Christopher L. Foote, Warren C. Whatley, and Gavin Wright, "Arbitrating a Discriminatory Labor Market: Black Workers at the Ford Motor Company, 1918-1947," *Journal of Labor Economics* vol. 21, no. 3 (2003), 500, Journal Storage Database, <http://www.jstor.org/stable/3653613>.

supervising whites. But black workers were mostly employed in hot, dangerous foundry jobs. Generally, quit rates were high at these places among whites but black workers did not leave these jobs as their cost of job loss was higher. Therefore they were considered as a hard-working and stable source of labour.¹⁵⁵

Employers of Black Workers (1939-1940)¹⁵⁶		
	The Total Number of Workers	The Number and Percentage Share of Black Workers
Ford Michigan Plants	90,000	11,000 (12,2%)
General Motors	100,000	2,500 (2,5%)
Chrysler	50,000	2,000 (4%)

Henry Ford's constant improvements of production methods and the cars themselves made his products in sufficient quantities and cheap enough to be affordable by ordinary people. He knew what people wanted and achieved to satisfy their demands by innovative methods. This made him one of the most successful manufacturers in the world.

3.1.3 The Model T – A Universal Car

The last secret of success deals with the Model T. Delbanco writes that by introducing this cheap and reliable car Henry Ford allowed common people to have their own vehicle and gave them the opportunity to travel.¹⁵⁷ This had a great impact not only on the whole of American society but on the world in general.

According to Ford and Crowther, the car maker had thought about making a universal car ever since he started his business. But it took some time until he earned enough money to build and equip the proper production plant and get the best and lightest materials.¹⁵⁸ Ford's idea was to satisfy the customers' needs once and forever. He did not want to get their money for one product and then persuade them to buy a new slightly different one.¹⁵⁹

Henry had had the concept of the car in his mind since 1905. But he did not have the right material to use. This had to be light but strong. He came across it by chance at a

¹⁵⁵ Ibid., 493-495.

¹⁵⁶ Ibid., 499.

¹⁵⁷ Andrea Delbanco, "Remembering the Model T," *Time for Students*, October-November 2008, 4.

¹⁵⁸ Ford and Crowther 1923, 17-18.

¹⁵⁹ Ibid., 41.

car race. He picked up a strip from a crashed French car and gave it to his assistant who made a chemical analysis. They came to the conclusion that this French steel contained vanadium, which gave it the exact features that Ford needed. They carried on experimenting and found an appropriate alloy for each car component.

The universal car should fit everyone's needs and appeal the multitudes. Not only the rich ones. Therefore production of only this one model in bulk should be enough. The basic features of the car were the quality of materials used, simplicity of mechanical operation because not all people are skilful mechanics, satisfactory power, interchangeable parts, lightness, low costs of operation and being able to control the car easily, according to the saying: "*Anybody can drive a Ford.*"¹⁶⁰

According to Ford's AR, the car was called the Model T and was introduced in 1908.¹⁶¹ Ford and Crowther also write that it was made so simply that everyone could easily repair or replace its parts. Also the new production methods made the parts so cheap that it would be even cheaper to buy new ones than have the old ones repaired. The simpler an article is, the easier is to make. Only then can it be sold cheaper and become affordable for a great number of people. The Model T had no features which were not already contained in some of the previous models.¹⁶² According to the website about Henry Ford, the car was originally manufactured at the Highland Park plant, but with increasing demand a new River Rouge complex was built and production was transferred there.¹⁶³

Ford and Crowther state that the Model T met huge demand and proved itself to be a universal car. Thus Henry decided in 1909 that the company would continue to manufacture this model only. Making just one model brought many advantages in production, the most important being the reduction of costs and prices. It was also decided that the car would be offered in one colour only. Henry announced: "*Any customer can have a car painted any colour that he wants so long as it is black.*"¹⁶⁴ Many people disagreed with this decision, especially those involved in selling activities, but Henry was right again.¹⁶⁵

According to Wicks, it is said that Henry Ford invented the middle class, as ordinary workers became middle-class consumers who could buy the cars they made.¹⁶⁶

¹⁶⁰ Ibid., 65-68.

¹⁶¹ 2002 AR, 9.

¹⁶² Ford and Crowther 1923, 69-71.

¹⁶³ Resources for Science Learning – The Case Files, Wider Pursuits.

¹⁶⁴ Ford and Crowther 1923, 72.

¹⁶⁵ Ibid., 71-72.

¹⁶⁶ Wicks 2003, 50.

The Model T was manufactured until 1926 and provided people “*with undreamed-of mobility.*”¹⁶⁷ At the beginning, there was a joke “*about the man who was going to be buried with his Model T, because they were never a hole they couldn't get out of.*”¹⁶⁸ On the other hand, at the end of the Model T's era, another joke said: “*A Model T was like a bathtub: You were embarrassed to be seen in one.*”¹⁶⁹ This perfectly described the situation where a new generation wanted a stylish car. It was too late for minor modifications and changing the variety of colours. Ford had to come up with a completely new model. It introduced the Model A and succeeded again.¹⁷⁰

The website about Henry Ford writes that there were made more than 15 million Model Ts.¹⁷¹ According to Delbanco, at the beginning, the car cost \$850, which would be about \$20,000 today. At that time it was about the half of other available cars.¹⁷² The website about Henry Ford points out that the initial price was finally reduced to \$300.¹⁷³ As Delbanco writes, when the Model T began to be manufactured, there were 194,400 registered vehicles in the USA (There are 135.4 million vehicles today.) In 1921, the Model T represented almost 57% of the worldwide car production. It was the best-selling car until 1972, when it was outdone by the Volkswagen Beetle.¹⁷⁴

3.1.4 Ford's Problems

The Selden Patent Suit

There were not only successes in the long existence of the Ford Motor Company. The car producer also had to go through many difficulties and problems which affected its future. Some of the complications had after all a positive impact on the company and some belong to the dark side of its existence. One of the problems Ford was able to turn to its advantage was the Selden patent suit.

Ford and Crowther write that George Selden applied for a patent for a “road

¹⁶⁷ Ibid. 53.

¹⁶⁸ Ibid., 53.

¹⁶⁹ Ibid., 53.

¹⁷⁰ Ibid., 53.

¹⁷¹ Resources for Science Learning – The Case Files, 93 Minutes.

¹⁷² Delbanco 2008, 4.

¹⁷³ Resources for Science Learning – The Case Files, 93 Minutes.

¹⁷⁴ Delbanco 2008, 4.

locomotive” in 1879. It was described as “*a safe, simple, and cheap road locomotive, light in weight, easy to control, possessed of sufficient power to overcome an ordinary inclination.*”¹⁷⁵ But nothing happened until 1895 when the patent was issued after 16 years of inactivity. Time had changed much. Hardly anyone knew anything about cars in 1879. On the other hand, there were many people working independently on motors by 1895. Selden was not interested in manufacturing his invention and sold the patent to the Association of Licensed Automobile Manufacturers (ALAM).¹⁷⁶

According to the website on patents, some car producers bought the right to make vehicles based on the Selden patent but some did not. Ford (and others) belonged to the latter group.¹⁷⁷ Ford and Crowther write that ALAM sued Ford for illegal misuse of the patent in 1903. This happened at the time when Ford became an important player in the car industry. The Selden patent was upheld but Henry Ford appealed. He always denied ALAM's exclusive right to make cars and pointed out its effort to become a monopolistic producer. The trial led to an advertising fight. ALAM indirectly declared that everyone who bought a Ford would be prosecuted. Ford decided to defend his reputation and in a four-page advertisement in all important newspapers all around the USA declared that every owner or a prospective buyer of a Ford car would receive a bond which would help to deal with any prosecution problems. This measure should reassure the customers. As a result, Ford sold twice as many cars than in the previous year (over 18,000 cars) and only about fifty buyers asked for the bond.

The aim of this suit was to get Ford out of the car business but it did the opposite. Ford gained through his determination to remain in the business public support which helped him to be even more successful.¹⁷⁸ Finally, as the website on patents writes, one year before it was to expire, the appeals court decided that the Selden patent was valid only for cars powered according to the original patent. By then, these were not produced any more.¹⁷⁹

¹⁷⁵ Ford and Crowther 1923, 61.

¹⁷⁶ Ibid., 60-61.

¹⁷⁷ Weird and Wonderful Patents, “George Who?” Brown & Michaels, PC Intellectual Property Home Page, <http://www.bpmlegal.com/wselden.html>.

¹⁷⁸ Ford and Crowther 1923, 60-63.

¹⁷⁹ Weird and Wonderful Patents.

The International Jew

In the words of Ribuffo was Henry Ford's personality complicated, and many biographers have tried to reveal and understand his actions.¹⁸⁰ His attitude towards Jews is one of the controversial issues of his life.

According to Ribuffo, *The International Jew* was a series published during the 1920s in *The Dearborn Independent*, a newspaper owned by Henry Ford. Its main idea was that Jews were a threat to the USA.¹⁸¹ After WWI, animosity towards Jews increased, and they were restricted from various places and social organizations.

Although Henry Ford was successful in his business, he faced a series of crises between 1915 and 1920. His decision to stop motor design and expand production instead of paying dividends disunited his shareholders and subordinates. He did not hesitate to lay off anyone who disagreed with him. He started to express his opinion on various events publicly and offered advice on solving them. He gained a reputation as an industrial and national leader who had an audience for everything he did or said. His views had been presented through his secretary Ernest Liebold who directed Ford's relations with the public. To spread his ideas, Henry Ford bought the weekly newspaper in 1919. *The Independent* printed nothing unusual at first and serious issues often received less attention than simple stories about known people.

Why Henry Ford started to attack Jews is not clear. Maybe he wanted to revenge for Jewish bankers not providing him a loan, gain more supporters for his presidential bid or because of other reasons.¹⁸² The first article of *The International Jew* series, an insert of the newspaper, was published in 1920.

Henry Ford daily visited the newspaper but he was interested only in Mr Ford's Page and *The International Jew*.¹⁸³ The people involved in the newspaper studied "The Protocols of the Learned Elders of Zion" which was a forgery created by Russian royalists in 1903 whereby Jews were to destroy Christian civilization.¹⁸⁴ It became the root of the series.¹⁸⁵ The series claimed to provide evidence of Jewish nonconformity to the American ideals and conspiracy against the USA. Jewish bankers were accused of misapplying

¹⁸⁰ Ribuffo 1980, 476.

¹⁸¹ Ibid., 437.

¹⁸² Ibid., 440-444.

¹⁸³ Ibid., 446.

¹⁸⁴ Ibid., 441.

¹⁸⁵ Ibid., 447.

money and the Jewish press of twisting news for their own advantage.¹⁸⁶

The Independent declared that there were no attacks on the Jews in the weekly, and from time to time tried to sound fair, citing reputable Jews. On the other hand it wrote: *"If Jews stopped trying to twist Americanism into something else, they could participate without objection in finance, entertainment, and government."*¹⁸⁷ It claimed to reflect society's point of view.

But the newspaper did not exclusively publish anti-Semitic articles. It contained travelling tips, articles about prominent people, supported women's suffrage or appointment of public defenders.

The Independent aroused support but opposition too. Henry Ford was distanced from the newspaper and his assistants answered any complaints themselves. Except for Mr Ford's Page, Jews were attacked on every page. The purpose of this was to give the impression that Ford was too busy at the car factory and had no time to be in charge of the newspaper.

Ford ordered the discontinuation of The International Jew in January 1922 because he realized that the supplement harmed both the company's sales figures and his ambition to become the President. However, he still discussed the questions in interviews. Anti-Semitic views appeared in The Independent again in November, and appeared regularly until 1925.¹⁸⁸

Henry Ford was sued for the anti-Semitic ideas presented in the newspaper but the cases did not come to trial. The last article was published in 1926. The Independent denied expressing anti-Semitic views and assured Jews of having the right to participate in society provided that they adopted American principles.¹⁸⁹ The publishing of the newspaper was ended in 1927 and Henry Ford apologized for the attacks on Jews.¹⁹⁰

Although Henry Ford's support of anti-Semitic ideas has been much discussed, it has not damaged his overall personal image of a successful entrepreneur and a good American. Being protected by Liebold, who took care of public relations and took responsibility for the newspaper, Ford was perceived positively by the majority of the public,¹⁹¹ despite receiving praise from the Nazis.¹⁹² But there were also people who

¹⁸⁶ Ibid., 450-454.

¹⁸⁷ Ibid., 456.

¹⁸⁸ Ibid., 457-462.

¹⁸⁹ Ibid., 465-466.

¹⁹⁰ Ibid., 469.

¹⁹¹ Ibid., 477.

¹⁹² Ibid., 470.

strongly disapproved of his opinions and decided not to support Henry Ford and his company in any way.¹⁹³

Although some of Henry Ford's ideas and opinions were not reasonable and should not have been expressed in public, there is no doubt that his economic, technical and cultural contribution to the world was great and deserves admiration.

¹⁹³ Ibid., 459.

3.2 Škoda Auto's Secrets of Success

3.2.1 Laurin and Klement – the Perfect Match

The second part of the section on secrets of success relates to the Škoda Auto Car Company. As well as at Ford, Škoda has to thank for its success its well established existence in the motor industry which significantly helped it to overcome many difficulties.

Kožíšek and Králík in the first volume of the history book write that Václav Klement was born on 16th October 1868 in the Czech town of Velvary. His parents belonged to the lower class and there were no signs that Václav would reach a higher social position. Fortunately, his teacher saw potential in him. He found him a trainee job at a bookseller. Václav, an avid reader, packed up his things and went barefoot (in order to spare his shoes) to the town of Slaný where he developed his knowledge in political, social and cultural life and tried riding a velocipede for the first time. Although this ride ended in an accident, it aroused in him an interest in this modern sport. He spent 4 years in Slaný, became a trained bookseller and on his own motivation got a further 3 years of general education.

After working for less than a year in Prague, Klement was offered a position as a bookshop manager in Mladá Boleslav some time around 1886. He proved himself in his new job and introduced the bicycle riding to this small town. He was one of the founders of the local bicycle club and the only one who had at least some knowledge of assembling bicycles. Klement, his bookshop and hobby became very popular among local people. He sensed the chance and decided to sell bicycles too.

Klement's own bicycle got damaged and therefore he decided to return it to its manufacturer, a German company, and asked for its repair. He wrapped it up, enclosed a letter in Czech and sent the package by train to the sales representative of the maker. The answer he received was: *“Wenn Sie von uns Antwort haben wollen, verlangen wir Ihre Mitteilungen in einer uns verständlichen Sprache.”*¹⁹⁴ Klement was furious. The manufacturer accepted Czech money but not the Czech language. This was the main reason why Klement decided to assemble bicycles on his own. But he was a realist. Even though he was a successful entrepreneur and had good knowledge of bicycles he was still a

¹⁹⁴ If you want an answer from us, we require you letters to be written in a language we understand.
Kožíšek and Králík 1995a, 9.

bookseller and had no idea of any technical issues. Moreover, there was a bicycle maker in the nearby town and Klement knew that he could not measure himself with the plant and its owners' experience. But he was lucky.

Václav Laurin worked for that velocipede manufacturer and had the status of a business partner. Luckily for Klement he fell out with his companion, decided to leave the manufacturer and start his own business. However, the Mladá Boleslav region was very small and there were only a few bicyclists, so it was impossible for the two men not to know about each other's intentions.

Laurin was born on 27th September 1865 into a poor family. Being very skilful and diligent his parents sent him to get trained in the locksmith's craft. Then he attended a craft school in Mladá Boleslav and worked in various garages. Later he passed the exam which allowed him to operate steam machines. When and how he met the bicycle manufacturer is not known. But the fact that he became his business partner confirms his exceptional technical skills and knowledge. If he had not had the quarrel with his companion, he would have probably worked there for the rest of his life.

Both Laurin and Klement had the same idea. They wanted to open a bicycle shop and a garage where they would assemble bicycle parts, first imported, later produced by themselves, and provide repair services. But two bicycle producers for one small town of Mladá Boleslav at the end of the 19th century were too much. They watched each other's steps with fear. Finally, in 1895, Klement and Laurin met and came to an agreement right away.

It was a win-win deal. Klement, a good manager and salesman, and Laurin, an expert on craft and technicalities. And only calm, thoughtful Laurin could successfully cooperate with hot-tempered Klement. They complemented one another perfectly.¹⁹⁵ Laurin spent most of his time in the plant and worked on technical designs and improvements.¹⁹⁶ Kožíšek and Králík in the second volume say that he always stood in the shadow of his partner but he was not the type of person who desired praise or fame.¹⁹⁷ On the other hand, Klement managed the factory, took care of employees, advertising and sales and represented the company. He sensed opportunities and believed in technical development.¹⁹⁸

¹⁹⁵ Ibid., 8-13.

¹⁹⁶ Ibid., 62.

¹⁹⁷ Kožíšek and Králík 1995b, 30.

¹⁹⁸ Ibid., 65.

According to the first volume by Kožíšek and Králík, in 1907, after making their company a joint-stock company, Klement was appointed to the post of general manager and Laurin became technical director.¹⁹⁹ But after selling it to Akciová společnost in 1925, both men were no more involved in directing the company.²⁰⁰ Kožíšek and Králík in the second volume write that Laurin passed away in December 1930.²⁰¹ Klement died in 1938.²⁰²

Laurin and Klement became symbols of an era. Their genuine interest in the new means of transportation and their great determination made it possible to start the business and become successful in the branch. According to Kožíšek and Králík, they did only the best in order to ensure the future to their company and this feature proved in their crucial decisions of 1907 and 1925.²⁰³

3.2.2 The Hrdlička Family

Another of the secrets of success is that Škoda was always able to find the right people to work with. The Hrdličkas had a great impact on the existence of the car maker.

Kožíšek and Králík write in the second volume of the history book that Karel Hrdlička was born in 1888 in Poděbrady. His father died so he was brought up by his mother and older sister. He was a very good student and received a Hlávka scholarship which enabled him to study machinery and electronics at the Czech Technical University in Prague. He gained much work experience in various factories before he was employed at Škoda. He was responsible for beginning assembly line production in the Mladá Boleslav factory. He was very successful and was appointed to the position of managing director in 1933.²⁰⁴

He was the head of the factory delegation to the Berlin auto show in early 1939, where both public and motor specialists looked forward to the display of Škoda products. Even Germany's representatives visited the exhibition. The famous photograph depicting Mr Hrdlička showing Adolf Hitler and Joseph Goebbels the chassis of the Popular model

¹⁹⁹ Kožíšek and Králík 1995a, 62.

²⁰⁰ Ibid., 124.

²⁰¹ Kožíšek and Králík 1995b, 30.

²⁰² Ibid., 66.

²⁰³ Ibid., 65.

²⁰⁴ Ibid., 21-22.

was reprinted in almost every Czech press.²⁰⁵ After the occupation of Czechoslovakia in March 1939 and the Germanization of all Czech companies, Hrdlička was fired from his job for his refusal of German citizenship. When two Gestapo officers entered his house and looked for a pretext to arrest him, they found only the photograph which saved him from the worst.²⁰⁶ But this was not the last time the Hrdlička family would be confronted with the picture.

After WWII, Hrdlička was asked to come back to the company on condition that he joined the Communist Party, so he never worked in the factory again. He died in 1979.²⁰⁷

Králík writes that Hrdlička's son, Petr, was born in 1934. As a son of a capitalist and class exploiter he did not have an easy life in Communist Czechoslovakia.²⁰⁸ According to Kožíšek and Králík, Petr Hrdlička was forced to leave a grammar school and after gaining practical experience as an apprentice in the locksmith-mechanic department of AZNP, he ended up in an industrial school.

He started working at the Institute of Motor Vehicle Research (whose main aim was to help car producers solve problems and suggest improvements) and continued his studies.²⁰⁹ Králík writes that although Hrdlička had the right to receive a scholarship he had to study at his own expense because a school inspector (an acquaintance of his father) wrote in a reference: "*Otec žadatele jest ředitel bývalé automobilky v Mladé Boleslavi ASAP. Nesporně typický představitel pilířů kapitalismu. ...je chyba, že jeho syn vůbec studuje.*"²¹⁰ Kožíšek and Králík mention that Petr Hrdlička recognized that if he wanted to be successful and have any peace in his life, he had to focus on a very difficult and boring branch of study and become a specialist in it. He chose hypoid transfers and received the red diploma at the Czech Technical University. Later he had the job of setting up the production line for gears in the AZNP. Soon he became head of the gear shop and was responsible for a large production hall. Then he returned to the Institute again.²¹¹

When the mad idea of the Communist Party to manufacture a completely new car in less than 5 years was introduced in 1982, Petr Hrdlička was 49 years old. It was a matter of the national pride and prestige. In spite of this no one wanted to assume the task. It was

²⁰⁵ Ibid., 69.

²⁰⁶ Ibid., 72.

²⁰⁷ Ibid., 80.

²⁰⁸ Jan Králík, *V soukolí okřídleného šípku* (Prague: Grada Publishing, a.s., 2008), 35-36.

²⁰⁹ Kožíšek and Králík 1995b, 125.

²¹⁰ The candidate's father, former managing director of the car manufacturer ASAP in Mladá Boleslav, is a typical representative of the pillars of capitalism... it is a mistake that his son is studying at all. Králík 2008, 44.

²¹¹ Kožíšek and Králík 1995b, 125.

simply impossible to design a new model in 2.5 years and put it into production in another 2 years. Time went by and the functionaries started to be nervous. There was still no head of the project. Then in March 1983, two officials from the car factory visited Mr Hrdlička in the Institute.

At that time he had become an expert in the motor industry. The Škoda company had offered him several jobs before, so Hrdlička immediately knew what was going on. It was an extremely difficult task but he knew that an opportunity of designing a completely new car, would not appear again. Finally, he said yes. A new Development Institute was founded and he became its head.

There was no time to lose. Two days later he travelled to the Geneva auto show to find a body designer. He made an agreement with a well-known Italian designer, Nuccio Bertone. Bertone was told that his designs had to be perfect because there was no time for any changes. Although the contract was not prepared yet, he agreed and started working.

Only after Hrdlička's arrival, did he become a regular employee of the AZNP. But he had to go through an interview with workers from the political screening division. One of the officials had been leafing through his secret personal file and finally had taken out a photograph. In the picture was Hrdlička's father with Hitler and Goebbels at the Berlin auto show in 1939. Petr Hrdlička had realized that this picture would accompanied him all his life, would be the cause of his many problems and would go on making his life difficult. It had and impact not only on his father's life but his own too. He had to explain why his father had collaborated, although it had not been true.

Finally, Petr Hrdlička could put together a group of skilful workers and start working. Only the newest technology and the best components available were used. This was sometimes difficult, as the Party representatives insisted on using products made in Communist countries only.²¹² But these did not meet exporting countries' standards. Many problems had to be worked out by unique solutions and this was possible only thanks to the enthusiasm and capability of the people on the team.²¹³

The car was called Favorit and was presented in July 1987 in due time. Although it was not a good step from the sales point of view because by the end of 1987 only 200 of them had been manufactured, it satisfied the Party's requirements.

The car, although not being a high-quality model, significantly helped the company

²¹² Ibid., 155-158.

²¹³ Ibid., 160-163..

to reinforce its position on the market and marked a great step forward in development.²¹⁴ It also had a great impact on the future of the Czech car industry²¹⁵ and helped to the company to arouse the interest in Škoda by foreign investors.²¹⁶

3.2.3 Merger of Škoda and Volkswagen

Finding the right people with whom to cooperate was important for Škoda's development. But, according to Kožíšek and Králík, finding the right investor after the political changes in 1989 was essential for the company's existence.²¹⁷

Bohatá writes that as a result of Škoda's unsuccessful attempt to export to North America, changes in mutual economic relationships with other former Communistic countries, and reduced purchasing power on the domestic market the company made a loss of almost 800 million crowns in 1990.²¹⁸ Moreover, according to Kožíšek and Králík, workplaces had to be modernized and the debt of 2.5 billion crowns used for the development of the Favorit needed to be paid off. The factory needed a strong investor and it was clear that it had to be a foreign company. There were 24 possible partners which expressed their interest in Škoda. The most famous ones were BMW, General Motors, Renault and Volkswagen.

What could Škoda offer to the future investor?

- Well-established production based on long tradition and a world-wide known brand.
- An inexpensive and qualified labour force.²¹⁹ Bohatá adds that another advantage were great manual skills of the Czech workers.²²⁰
- Factories in a politically stable country with favourable position in the centre of Europe which offered advantages in logistics.²²¹
- Kožíšek and Králík write that the production of the Favorit model could, after introducing innovations and changes relating to its quality, go on.²²²

²¹⁴ Ibid., 165.

²¹⁵ Ibid., 155.

²¹⁶ Ibid., 186.

²¹⁷ Ibid., 186.

²¹⁸ Bohatá 1998, 35.

²¹⁹ Kožíšek and Králík 1995b, 184-186.

²²⁰ Bohatá 1998, 33.

²²¹ Ibid., 32.

²²² Kožíšek and Králík 1995b, 186.

- The new investor would also get a chance to export its products to the markets of Central and East Europe, and Asia.²²³
- On the other hand, the factory was heavily in debt and needed investments for modernization.²²⁴ Bohatá also points out that a new know-how in the area of management and quality increase had to be introduced²²⁵ All these things should help Škoda to raise its competitiveness on the international market.²²⁶

According to Kožíšek and Králík, in 1990, it was decided that Volkswagen, a German car maker, would become the partner for Škoda. VW's ideas of the future of Škoda were that:

- Škoda would become VW's legal entity together with Audi and Seat.
- VW wanted to go on manufacturing the Favorit model and concentrate on major improvements of its quality and also suggested introducing innovations. A new model would come in 1994 and would be designed in Mladá Boleslav (with some help from VW).
- VW agreed to invest in Škoda. Altogether, nine billion German marks would be invested over the period of ten years. The main projects financed through this investment would be the building of a new engine plant and the development of new types of engines.²²⁷

The contract was signed on 28th March 1991. The new company was called Škoda Auto, Joint-stock company (Škoda Auto, akciová společnost) and entered VW on 16th April 1991.²²⁸ Bohatá points out that the Czech government could interfere in some situations as it remained a co-owner of Škoda.²²⁹ According to Kožíšek and Králík, the acquisition was divided into the following stages:

1. At the beginning, after paying 300 million marks and additional 120 million marks of debt, VW would take a 31% share.
2. After paying another 350 million marks and 40 million marks of debt, it would obtain a 50.5% share.
3. After paying the final sum, which would bring total investments to 1.2 billion

²²³ Ibid., 189.

²²⁴ Ibid., 186.

²²⁵ Bohatá 1998, 33.

²²⁶ Ibid., 28.

²²⁷ Kožíšek and Králík 1995b, 186.

²²⁸ Ibid., 188.

²²⁹ Bohatá 1988, 40.

marks, VW's share would reach 70%.²³⁰

4. According to Škoda's AR, in 2000, the Czech government sold the state's share and VW became the only owner of Škoda.²³¹

Kožíšek and Králík point out that VW's first task was to raise confidence in the Škoda brand. A sustainable increase in quality was assured by the cooperation of both companies and passing on know-how.²³² Bohatá writes that Škoda used the German model of management which made the relationships within the company more direct. A new company strategy was introduced which put emphasis on quality, price and service. A new system of observing flaws in cars and customer satisfaction was put in operation.²³³ As a result, between 1991 and 1998, the company raised the quality of its products by 30%.²³⁴ Some of Škoda's suppliers were integrated with the factory which led to the better transport, lower costs, quality increase and the better reaction to changes in manufacturing processes. On the other hand, Škoda stopped the activities which were not connected with car making.²³⁵

Kožíšek and Králík note that the number of Škoda employees began shrinking systematically, necessitated by poor productivity and rising expenses. *“While in 1994, nearly 16,000 workers built 174,000 Škodas, 13,000 employees of the Ford Motor Company built 267,720 Model T's 80 years ago.”*²³⁶ A change in approach to work of Czechs was needed. After these measurements, productivity began to improve slowly.²³⁷

Changes in the Number of Škoda Employees after the Merger with VW²³⁸			
Year	1993	1994	1995
Employees	17,048	15,985	14,460

Bohatá remarks that the growth of output and sales was also caused by the increased exports. In 1991, the value of export was 8.3 billion crowns, whereas in 1993 it reached 17.6 billion. Moreover, Škoda succeeded abroad in the time when the whole automotive industry was in a crisis.²³⁹

²³⁰ Kožíšek and Králík 1995b, 188.

²³¹ About Škoda – For Investors, “Annual Report 2000,” Škoda Auto, 6, <http://new.skoda-auto.com/about/investors/annual/Pages/Annualreports.aspx>.

²³² Kožíšek and Králík 1995b, 188.

²³³ Bohatá 1998, 28.

²³⁴ Ibid., 32.

²³⁵ Ibid., 28-29.

²³⁶ Kožíšek and Králík 1995b, 189.

²³⁷ Ibid., 188-189.

²³⁸ Ibid., 188.

²³⁹ Bohatá 1998, 30-31.

As Kožíšek and Králík write, a problem appeared when VW refused to grant a loan to Škoda Auto in 1993 based on the merger contract because the concern faced difficulties due to the critical situation of Seat.²⁴⁰ The loan was provided only in 1994 and was used for the construction of a new engine and production plant, and to produce the new Octavia model.²⁴¹

By the merger Škoda got a strong investor whose brand has always been a symbol of quality and reliability, and just the signature of the contract was a great recommendation of the Czech manufacturer and its products.²⁴² The Mladá Boleslav car factory gained a future for its brand and this was exactly what Václav Klement had wanted to do.²⁴³ According to company's AR, since Škoda became a part of VW Group, it has more than tripled its output, broadened its model lines, and turned around its brand's image. It has also established a large sales and service systems and successfully entered new markets.²⁴⁴

3.2.4 Škoda's Problems

Political Fight

There were also situations which had a negative impact on Škoda and its development. Car production and technical progress were slowed down under the Communist regime and put Škoda at a disadvantage.

According to Kožíšek and Králík, after the nationalization of the car factory in 1945, the basic trade principles of the management were changed to principles of the centrally planned economy. Decisions about the production plans, vehicle models and where should individual people work were taken over entirely by political commissions, councils and important Party members.²⁴⁵ The factory branch of the Communist Party even decided about lesser changes in car designs.²⁴⁶ A new type of a universal manager was created, who was capable of directing any company on the basis of political instructions,

²⁴⁰ Kožíšek and Králík 1995b, 191-192.

²⁴¹ Ibid., 196-197.

²⁴² Ibid., 188.

²⁴³ Ibid., 65.

²⁴⁴ AR 2008, 18.

²⁴⁵ Kožíšek and Králík 1995b., 91.

²⁴⁶ Ibid., 153.

plans and simple schemes, no matter what his knowledge of the sector was.²⁴⁷ Even car production was suddenly a political matter.²⁴⁸ The sales department was cancelled and all sales activities were performed by the newly established domestic trading company, Mototechna,²⁴⁹ and a foreign trading company, Motokov.²⁵⁰

The car manufacturer received only 1,000 crowns from each sold car (before taxes) and this could hardly provide any financial resources for plant maintenance, let alone for further investments.²⁵¹ When one of the company's directors tried to get some money for modernization, he was accused of handing out cars to several party functionaries and became a warning example for others.

Škodas were mostly intended for foreign markets. They were very popular abroad and more importantly they were a way of getting hard currency for Czechoslovakia. Motokov's employees listened attentively to the comments and complaints of customers from abroad. On the other hand, lines of people waited at Mototechna where no cars were in sight.²⁵²

But it could be said, compared to other industries, that the Communists looked after the car factory in Mladá Boleslav with particular interest because, as stated above, it earned enough money for the state. The Party made two heavy investments in the plant to modernize and broaden its production. Therefore, after the Velvet Revolution in 1989, car production in Mladá Boleslav was in a position to arouse the interest of investors from abroad and then compete in newly-opened markets.²⁵³

²⁴⁷ Ibid., 91.

²⁴⁸ Ibid., 101.

²⁴⁹ Ibid., 102.

²⁵⁰ Ibid., 151.

²⁵¹ Ibid., 186.

²⁵² Ibid., 148-151.

²⁵³ Ibid., 184.

4. Recent Development and Prospects

The last section of this thesis deals with the recent development and future prospects of Ford and Škoda Auto. Although both companies weathered the current economic recession, they will have to come up with a new approach and ideas which will help them to remain in the automotive market.

4.1 Ford Motor Company

The website on Company Histories writes that although Ford improved its profitability and regained its market position at the end of the 1990s,²⁵⁴ it had to take many challenges in the new millennium.²⁵⁵ According to Ford's AR, William Clay Ford, Jr., Henry Ford's great grandson, became the chairman of the Board of Directors and later, in 2001, was appointed to the position of company's CEO.²⁵⁶ Ford continued with acquisitions and purchased Land Rover, a sport-utility vehicle specialist.²⁵⁷

O'Rourke writes that a problem came in 2000 when Ford and Firestone, a tyre manufacturer, recalled its products which were used as original equipment on Ford vehicles.²⁵⁸ Ford was forced to replace the faulty tyres and several deaths were related to them, which damaged Ford's public image even more.²⁵⁹

The website on Company Histories writes that Ford got into the red and started to lose its position on the market. Therefore the management decided to restructure. Five factories and several car lines were closed, 35,000 people laid off and measures to cut costs were introduced.²⁶⁰ According to the ARs, it sold some non-core assets in the value of one billion dollars and thus reduced its losses. New product development and launching of new models were supported. Production of a large number of models required new manufacturing methods. Therefore the plants were modernized and assembly lines

²⁵⁴ Company Histories, Challenging Early 1990s.

²⁵⁵ Ibid., The New Millennium.

²⁵⁶ 2002 AR, 26.

²⁵⁷ Ibid., 22.

²⁵⁸ James O'Rourke, "Bridgestone/Firestone, Inc. and Ford Motor Company: How a Product Safety Crisis Ended a Hundred-Year Relationship," *Corporate Reputation Review* vol. 4, no. 3 (2001), 257, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=6907146&site=ehost-live>.

²⁵⁹ O'Rourke 2001, 259-262.

²⁶⁰ Company Histories, The New Millennium.

transformed to be more flexible, cost-efficient and able to build different models from the same basic platforms.²⁶¹ Ford broadened its production capacity and distribution channels in China in 2003.²⁶² It also presented its first SUV hybrid,²⁶³ a vehicle that “*derives its propulsion from a combination of two or more separate powertrains.*”²⁶⁴ Ford was able to generate income in 2003²⁶⁵ but got into a loss position again in 2006.²⁶⁶

A new fundamental restructuring plan relating to the North American market was presented by the new management and launched in 2006.²⁶⁷ The company continued with the divestment of its units and spun off the Hertz Corporation in 2005.²⁶⁸ Two years later, it sold its sports car business Aston Martin. The divestments were done in order to reduce company costs and so return to profitability by concentrating on its core-businesses only, mainly on Ford, Mercury and Lincoln car production and related financial services.²⁶⁹

The company negotiated a labour agreement with the UAW in 2007, which would let Ford invest in new products and so make company's competitiveness better. Ford improved its financial situation but was still in the red.²⁷⁰

The company continued to develop economical and environmentally-friendly vehicles.²⁷¹ Other subsidiaries, Jaguar and Land Rover, were sold in 2008. Ford also sold a significant portion of its ownership in Mazda. Some North American plants were closed.²⁷² As *Geely buys Volvo - Status Symbol* writes, Volvo was sold in 2010.²⁷³

According to its ARs, during the present financial recession, Ford was one of the few companies which evaded bankruptcy and did not need state financial back-up thanks to its adequate liquidity.²⁷⁴ The company continued to develop environmentally-friendly vehicles and introduced EcoBoost engine technology.²⁷⁵ Ford Credit was able to finance its

²⁶¹ 2002 AR, 5-7.

²⁶² About Ford, “Annual Reports - 2003 Annual Report,” Ford Motor Company, 28, <http://www.ford.com/microsites/annual-reports>.

²⁶³ Ibid., 8.

²⁶⁴ 2002 AR, 30.

²⁶⁵ 2003 AR, 32.

²⁶⁶ 2006 AR, 5.

²⁶⁷ About Ford, “Annual Reports - 2005 Annual Report,” Ford Motor Company, 4, <http://www.ford.com/microsites/annual-reports>.

²⁶⁸ Ibid., 2.

²⁶⁹ About Ford, “Annual Reports - 2007 Annual Report,” Ford Motor Company, 21, <http://www.ford.com/microsites/annual-reports>.

²⁷⁰ Ibid., 5.

²⁷¹ 2008 AR, 6.

²⁷² Ibid., 12.

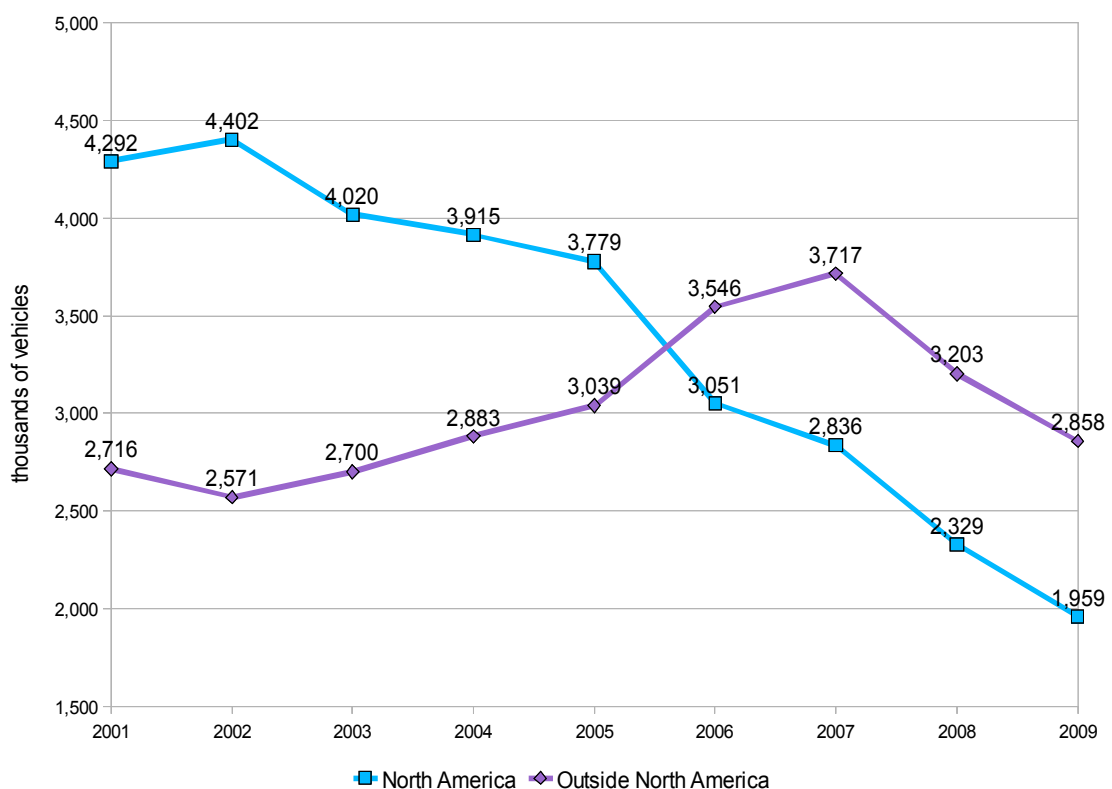
²⁷³ “Geely Buys Volvo - Status Symbol,” *The Economist*, March 31, 2010, http://www.economist.com/node/15825810?story_id=15825810.

²⁷⁴ 2008 AR., 5.

²⁷⁵ Ibid., 4.

business and support sales activities in spite of the unfavourable global economic situation, by decreasing receivables, using its liquidity and state-sponsored schemes in the USA and Europe.²⁷⁶

Ford is investing in cross-over (in North America)²⁷⁷ and smaller (in Europe) cars²⁷⁸ which are fuel-efficient, in order to satisfy the demands of new customer. The plants will have flexible body shops which enable quick response to changing market requirements, and manufacturing will be reduced to match lower demand. Ford's future strategy comprises company restructuring in order to be more profitable at lower volume, faster product development, improving quality and reducing plant complexity.²⁷⁹ The company wants to achieve a more balanced portfolio of its vehicles and make its cars common in all its markets.²⁸⁰



Illustrate 3: Ford Motor Company Vehicle Sales (Source: Ford's ARs, Operating Highlights.)

²⁷⁶ Ibid., 33.

²⁷⁷ 2007 AR, 1.

²⁷⁸ Ibid., 15.

²⁷⁹ 2008 AR, 12.

²⁸⁰ Ibid., 6.

4.2 Škoda Auto

Škoda Auto was successful in the new millennium. It was shown that the choice of Volkswagen as Škoda's business partner was a good one. According to its ARs, the plants were modernized. The company purchased new systems that were compatible with environmental regulations,²⁸¹ received the certificate of environmental ISO standards,²⁸² and improved work processes and the models of management.²⁸³ The company was able to offer extended product lines of its vehicles²⁸⁴ and enter new markets.²⁸⁵ Since 1999, Škoda has been able to increase the number of vehicles produced (except for 2002-2003 and the recent years affected by the global recession)²⁸⁶ and has become the biggest exporter of the Czech Republic.²⁸⁷

In 2000, VW started negotiations with the Czech government and later purchased the remaining 30% shares and so became the only owner of the Škoda Auto.²⁸⁸ A workshop making gearboxes was started in the newly built engine plant and the transmissions were supplied to other companies in the VW group.²⁸⁹ In cooperation with an automotive testing company, Škoda established an “e4t” company which has dealt with electronics for transportation and various innovations.²⁹⁰ Škoda Auto Institute of Higher Education (Škoda Auto vysoká škola) became the first company-owned university in the Czech Republic. Its aim is to provide education in business academic programs and prepare the company's future employees.²⁹¹ Škoda made a licence agreement for producing its cars in the Ukraine²⁹² and later established an assembly line there.²⁹³

The financial situation of Škoda in 2002 was influenced by the stagnating economic environment and the strengthening Czech currency. In order to be more competitive, the

²⁸¹ *AR 2000*, 31.

²⁸² About Škoda – For Investors, “*Annual Report 2001*,” Škoda Auto, 7, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>.

²⁸³ *Ibid.*, 22.

²⁸⁴ *AR 2008*, 12-13.

²⁸⁵ *Ibid.*, 30-33.

²⁸⁶ About Škoda – For Investors, “*Annual Report 2004*,” Škoda Auto, 9, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>; *AR 2009*, 13.

²⁸⁷ *AR 2008*, 38.

²⁸⁸ *AR 2000*, 6.

²⁸⁹ *AR 2001*, 19.

²⁹⁰ *Ibid.*, 47.

²⁹¹ *AR 2000*, 33.

²⁹² *AR 2001*, 19.

²⁹³ About Škoda – For Investors, “*Annual Report 2002*,” Škoda Auto, 6, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>.

company started reducing its costs.²⁹⁴ It was successful on the Indian market.²⁹⁵ Škoda's Technical Development Department was not only doing design, construction, testing and improvements of Škoda cars, engines and gearboxes, but also performed projects for VW and its other subsidiaries.²⁹⁶ Škoda expanded its strategy of electronics development and introduced new designs for the future, especially recreational vehicles.²⁹⁷

Its good position in the fast-growing Asian market was confirmed as a new assembly plant was opened in India.²⁹⁸ In 2004, its overall financial situation improved thanks to economic growth, right customer focus and reduced costs.²⁹⁹ The total workforce was increased.³⁰⁰ A new assembly factory in Kazakhstan was established in 2005.³⁰¹

The company broadened its product portfolio and achieved to produce more than half a million vehicles.³⁰² Its brand was officially presented in China and Škoda took a share in the “OOO VOLKSWAGEN RUS” subsidiary in 2006.³⁰³ A year later, a new plant for producing and assembling VW and Škoda cars was established in Russia.³⁰⁴ The GreenLine fuel-efficient models were introduced and the company also started the development of alternative engines.³⁰⁵

The company ownership was reorganized in 2007. The sole owner of Škoda Auto became Volkswagen International Finance N.V., a direct 100% subsidiary of VW AG.³⁰⁶

Although the current financial recession is having an enormous impact on automotive markets all over the world, with many companies facing difficulties, Škoda has been able to stay in business and even grow.³⁰⁷ Its positive financial results are due to huge demand for smaller cars based on car scrap subsidy schemes applied by some states, and also due to its good position in the still-growing Asian markets.³⁰⁸ The company delivered more vehicles in 2009 than in the previous year. A new SUV model was launched in 2009

²⁹⁴ *AR 2002*, 30.

²⁹⁵ *Ibid.*, 21.

²⁹⁶ *Ibid.*, 12-13.

²⁹⁷ *AR 2003*, 28.

²⁹⁸ *Ibid.*, 32.

²⁹⁹ *AR 2004*, 12-13.

³⁰⁰ *Ibid.*, 42.

³⁰¹ About Škoda – For Investors, “*Annual Report 2005*,” Škoda Auto, 40, <http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx>.

³⁰² *AR 2006*, 4.

³⁰³ *Ibid.*, 6-7.

³⁰⁴ *AR 2007*, 42.

³⁰⁵ *Ibid.*, 47.

³⁰⁶ *Ibid.*, 8.

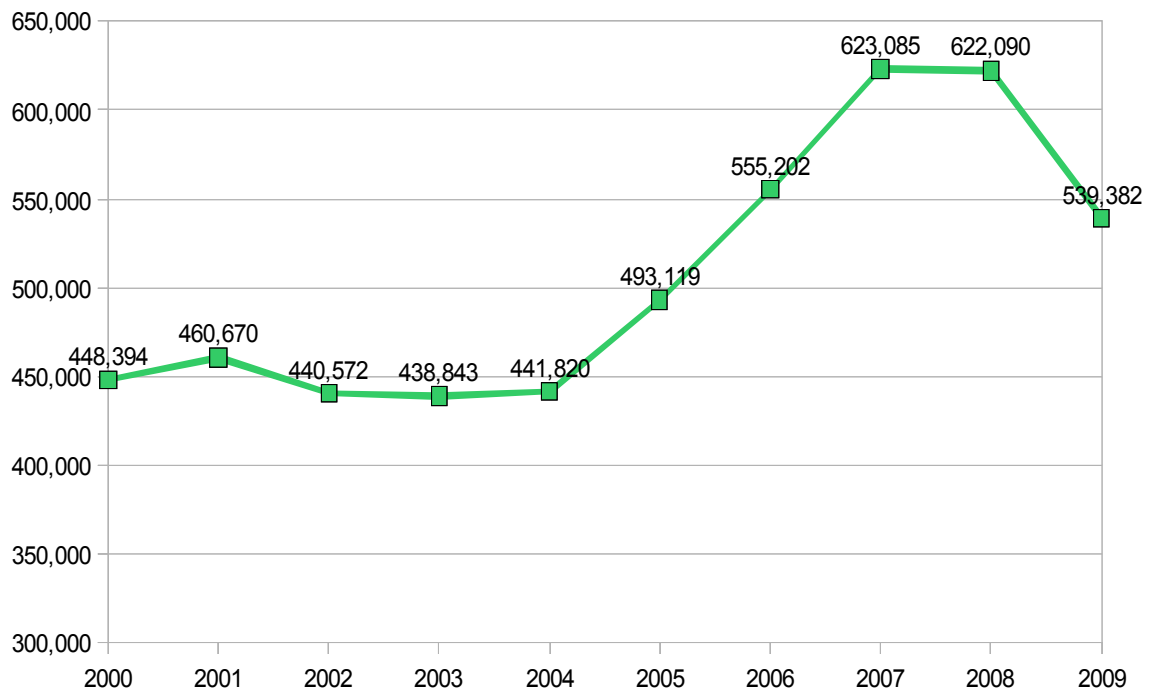
³⁰⁷ *AR 2008*, 4.

³⁰⁸ *AR 2009*, 40-41.

which appeals to a new category of customers.³⁰⁹

Škoda has to deal with the problem of transferring production to Slovakia because of the strong Czech Crown.³¹⁰ Its parent company also wants Škoda to focus on smaller and cheaper cars,³¹¹ although there is a high demand for the luxurious new-generation Superb line.³¹²

In the near future, Škoda Auto's main tasks will be to achieve prosperity and competitiveness by reinforcing its position in Western Europe, retaining its strong position in Central Europe and establishing a good position in Asian markets. The strategy to fulfil these goals will be based on launching a new model every year and producing environmentally-friendly vehicles in order to appeal to the greatest number of customers.³¹³



Ilustrace 4: Škoda Auto Company Vehicle Sales (Source: Škoda's ARs, Selected Data and Financial Figures)

³⁰⁹ Ibid., 13-14.

³¹⁰ Ibid., 67.

³¹¹ Ibid., 33.

³¹² Ibid., 46.

³¹³ AR 2008, 81.

5. Conclusion

In this thesis I have attempted to find the secrets of success of two traditional car producers, Ford Motor Company and Škoda Auto.

After carefully studying materials relating to these companies I came to the conclusion that these two car manufacturers, although based on different continents and surrounded by distinctive economic, political and cultural environments, have much in common. Which particular things do they share?

They are both representative of the very few companies with a long history which were able to overcome many changes and difficulties and survive into the present. They also belong to the small number of companies which weathered the current financial crisis and global recession without any direct government help. How is it possible that Ford and Škoda are still in operation? How is possible that they are selling sufficient numbers of vehicles when other car manufacturers are facing serious credit and production problems which may even lead to their bankruptcy?

The answer to this question lies in Ford's and Škoda Auto's long tradition. Ford Motor Company and Škoda Auto were established more than one hundred years ago when the modern motor industry was just at the outset. They were founded by the right people with a great passion for technical progress who did not hesitate to take the opportunity of becoming actively involved in the newly developing business. The beginnings were not easy. The car makers had to break through the initial public suspicion toward motor vehicles. They had to convince people that the cars were the means of transportation of the near future. And they were right. Henry Ford, founder of Ford Motor Company, and Václav Laurin and Václav Klement, founders of future Škoda Auto, became important players in the emerging car industry, and built solid foundations for their companies. They were great enthusiasts and put tremendous effort into their businesses.

Henry Ford was a very inquisitive and skilful mechanic, and more importantly a very capable businessman. He had many revolutionary thoughts which changed market habits and the view on a customer. He always supported automotive research and development. On the other hand, he was also able to utilize other people's ideas and inventions for his own production and so make innovations. He understood the importance of making improvements and therefore encouraged investments in his factories. Henry

Ford knew that only production in bulk could be sustainable and that productivity was based on economies. He significantly cut the costs of car production and appropriately motivated his employees to greater performance. He came up with a completely new attitude to manufacturing and labour processes, which made him famous.

Václav Klement and Václav Laurin started doing their business with velocipedes. As Henry Ford did, they followed the technical development and saw the future of the combustion engine too. They gradually moved on from bicycles to motor bicycles and finally to cars. They were able to steer their company through many difficulties and their vehicles were found all over the world. How did they achieve it? The cars of the L&K trademark were produced in a such way as to be affordable but, at the same time, they were reliable. The tasks of the two heads were equally divided. Laurin, a skilful mechanic, surrounded himself with machines and things concerning technical matters, while Klement, originally a bookseller, was in charge of trading. They complemented one another perfectly. Both men were very loyal to the company they established and always took special care of it. They were determined to ensure the continuation of their company and vehicle production even though it meant losing their control over it (They transformed the car factory into a joint stock factory in 1907 and then sold it in 1925 in order to secure enough financial resources for its development.)

As stated above, Henry Ford came up with many revolutionary ideas concerning production processes and work performance. He wanted to make his cars affordable for a wide range of customers and achieved it with his Model T. He established mass production in the automotive industry in 1913. The production in bulk was based on the introduction of the assembly line in Ford factories which enabled production to flow in the factories at a steady pace. Individual processing tasks were not so complex and the mental involvement of the labourers was reduced so less time was needed for the implementation of tasks. These improvements in production methods significantly accelerated all manufacturing processes, improved production quality and reduced costs. Also no special skills were required in the factories and so unqualified or less capable people could find jobs there too. Work at Ford was not always easy and thus the labourers had to be sufficiently financially motivated. Therefore Henry Ford decided to raise the wages in his factories and so prevented himself from having problems with recruiting enough workers and with the increasing power of the trade unions.

The Škoda car company also kept abreast of the latest developments in the motor

industry and soon recognized that introducing the new manufacturing methods in its factory was essential for its future. The assembly line was established there in 1928.

Both companies started manufacturing standardization in advance of their local competitors and this gave them a considerable advantage.

Ford and Škoda shared the idea of making a car for everyone. Both companies wanted to gain the major market share and become the most successful car producers in their countries by providing a small, cheap and reliable car. The flagship product of Ford, the so called universal car, became the Model T, which was introduced in 1908 and was connected with one era. It was the first vehicle which was affordable even for middle-class people who could finally enjoy travelling freely. In fact, it is said that Henry Ford enabled the creation of the middle-class by paying his employees wages high enough to let them buy the products they manufactured. The Model T had a great impact not only on American society but on the world in general.

Škoda introduced its flagship, the people's car, Popular in 1934. This model gained a lot of popularity. For many years it was the best-selling car in Czechoslovakia and could be found abroad too. The factory tried to come up with similar vehicles when it was under the control of the Communist Party, but these cars did not prove themselves in quality. Moreover, they could not become the people's car as they were not produced in sufficient quantities.

The Model T and the Popular became the cars which were closely associated with one era of the automotive industry.

Another of the secrets of success of Ford Motor Company and Škoda Auto lies in their ability of finding the right people and companies with whom cooperate. When Laurin & Klement realized that they were not able to develop their factory on their own any more, they decided to sell it to Škoda Works. This company took care of the car maker and supported its development and thus secured its future. Škoda was also lucky to find capable employees who were loyal to the company. This thesis mentions the Hrdličkas, a family connected to the car factory through two generations. Mr Karel Hrdlička was responsible for establishing a new assembly plant and modernizing the manufacturing methods in 1928. His son, Petr Hrdlička, is known as the father of the Favorit model which was introduced in 1987. Designing and putting the whole car in production in less than 5 years was unbelievable and proved Hrdlička's qualities. This model showed that the company was able to keep up with foreign competitors and that cars of the western style

could be made in Czechoslovakia too. The Favorit raised the prestige of Czechoslovakia and helped the company to make its chances of finding a good business partner after the fall of Communism in 1989 better.

There is no doubt that Škoda would not have become a car producer known worldwide if the Czechoslovak government had not decided to invite a foreign investor after the fall of Communism. The process of choosing the right business partner was long and not always easy, but it was worth it. Finally, Volkswagen was chosen to become the business partner for Škoda in 1991. This proved to be the right choice as the two companies immediately started working on Škoda's rebirth. Škoda had many things to offer to its German investor but it also faced difficulties with the bad reputation relating to the quality of its cars. Volkswagen provided large investments for introducing new production techniques and training for the factory employees. It also supported the independent development of Škoda brand, and transformed it into an important supplier of engines and gearboxes for VW itself and for its other subsidiaries. Škoda Auto proved to be a good investment for Volkswagen as it continually increased its production and profits and became a significant player in the automotive market.

Ford Motor Company went through many difficult times after WWII. However, members of the Ford family, who were still involved in the management, were able to find the right business people to control the company. These managers had experience not only in the automotive industry (like GM ex-employees) but, according to Ford's AR, also in other branches (e.g. Boeing Aerospace Company³¹⁴) and secured the return of Ford to the group of the most successful companies in the world. The company was well restructured by those managers. It was prepared for the hard times of decreased demand for passenger cars by diversifying its activities into the branch of financial services. Ford was also interested in the new manufacturing methods which came from Japan and took a share in the local car producer Mazda. In order to gain new customers it also widened its production portfolio by purchasing other car producers.

In hard times, it was essential to find the right people who could help Ford and Škoda Auto to restructure and to cooperate with the right companies and so overcome many difficulties. Both companies dealt with this well.

Ford and Škoda were also lucky in particular instances. They got into difficulties and their transformation was finished before serious global economic problems appeared.

³¹⁴ 2006 AR, 3.

This happened in the early 1990s at Škoda and at the turn of the millennium at Ford. This made the subsequent economic recessions much easier to overcome because they were already prepared. They gained the advantage over other car producers.

Firm establishment by their founders, historical development, pursuing technical progress, having revolutionary visions and implementing them, constantly increasing efficiency, facing problems and looking for unique solutions to them, finding the right people and companies to work with, being part of the lives of many generations, and also many other things, enabled Ford Motor Company and Škoda Auto to weather all difficulties and follow their heritage up to the present. There was no magic formula which would ensure their success. Both companies just had their visions and skills. They were also aware of the responsibility they had toward the generations of their customers, employees and business partners. That is precisely why their success is based on the tradition and long experience they have in the automotive industry. And this is the secret of success which will help them to get over the current unfavourable economic situation and to stay in operation.

Annexe

Ford Motor Company Time Line

- 1863 Henry Ford is born.
- 1896 Henry Ford makes his first vehicle, Quadricycle.
- 1903 Henry Ford founds the Ford Motor Company.
The Selden Patent Suit starts.
- 1908 The Model T is introduced.
- 1913 An assembly line is established at Ford factories.
- 1914 Henry Ford announces a 5-dollar day at his factories.
- 1918 Edsel Ford becomes company president.
The construction of the River Rouge manufacturing complex is started.
- 1919 The Ford Motor Company is re-registered.
- 1920 The International Jew series is published in Ford's newspaper.
- 1922 Lincoln is purchased by Ford.
- 1926 Production of the Model T is finished.
- 1932 A V-8 block makes Ford the first company to cast the block in one piece.
- 1938 The Mercury brand is formed.
- 1942 The Willow Run plant produces military equipment.
- 1943 Edsel Ford dies and Henry Ford resumes presidency.
- 1945 Henry Ford II becomes company president.
- 1947 Henry Ford dies.
- 1956 The Ford Motor Company goes public.
- 1958 The unsuccessful Edsel model is launched.
- 1959 Ford Credit is formed.
- 1961 Ford purchases Philco, an electronic devices manufacturer.
- 1964 Mustang sports model is launched.
- 1979 Ford starts cooperation with the Mazda cars producer.
- 1985 The Taurus model is launched.
- 1987 Ford acquires a stake in Hertz, a car rental company.
- 1989 Ford purchases Jaguar.
- 1999 William Clay Ford, Jr. becomes chairman of Ford.
Ford purchases Volvo.
- 2000 Land Rover is purchased.
The Firestone tyres are recalled by Ford.
- 2005 Ford sells Hertz.
- 2008 Ford sells Jaguar and Land Rover.
- 2010 Ford sells Volvo.

Škoda Auto Time Line

- 1865 Václav Laurin is born.
- 1868 Václav Klement is born.
- 1895 Václav Laurin and Václav Klement establish a factory for assembling bicycles.
- 1899 The first motorcycle is launched.
- 1905 The first car is manufactured.
- 1907 Laurin & Klement, a joint-stock company, is established.
- 1924 A fire breaks out in the L&K factory.
- 1925 L&K merges with Akciová společnost.
- 1928 An assembly plant is built.
- 1930 Joint-stock Company for Automotive Industry (ASAP) is established.
Václav Laurin dies.
- 1932 The Motor Company, a joint-project of ASAP and Praga, is established.
- 1933 Karel Hrdlička becomes managing director.
- 1934 The Popular model is launched.
- 1938 Václav Klement dies.
- 1945 ASAP is nationalized and becomes Automotive Works, National Company (AZNP).
- 1969 A fire breaks out in the plant.
- 1987 The Favorit model is launched.
- 1991 Škoda merges with Volkswagen, a German car manufacturer.
- 2000 Škoda Auto Institute of Higher Education is established.
A new engine plant is built.
- 2006 Škoda takes part in a joint-project with VW in Russia.
- 2007 The sole owner of Škoda becomes Volkswagen International Finance N.V.

Shrnutí

Automobilový průmysl patří mezi odvětví, která byla nejvíce zasažena globální recesí odstartovanou v roce 2008. Mnoho výrobců motorových vozidel řeší závažné problémy s odbytem. Mezi nejvíce zasažené trhy patří USA, kde se poptávka po nových automobilech výrazně snížila a někteří automobiloví výrobci se byli schopni udržet na trhu jen díky finanční pomoci poskytnuté americkou vládou. Evropský automobilový trh musel být také výrazně podpořen tzv. šrotovacími prémie, příspěvky na koupi nového vozu poskytnuté občanům výměnou za doklad potvrzující likvidaci jejich původního auta. Celý automobilový průmysl zažívá těžké časy a jediným způsobem, jak překonat toto období, je projít vhodnou restrukturalizací.

Tato bakalářská práce se zaměřuje na dva výrazné automobilové producenty, americkou společnost Ford a českého výrobce Škoda Auto. Jejím hlavním cílem je analyzovat tyto dvě společnosti z pohledu historického vývoje a zaměřit se na okamžiky, které se staly významnými milníky jejich existence a měly pozitivní vliv na jejich další rozvoj.

V úvodu práce je přiblížen vliv současné nepříznivé ekonomické situace ve světě na automobilový průmysl a stručně je popsán i samotný vývoj motorových vozidel. Dále jsou ve formě profilů představeny společnosti Ford a Škoda Auto, které jsou předmětem hlavního tématu práce. Samotný text práce je rozdělen do tří kapitol, z nichž se každá skládá ze dvou částí, které se konkrétně týkají uvedených společností:

1. Historický vývoj
2. Tajemství úspěchu
3. Současnost a ekonomický výhled

Údaje použité v této práci pocházejí z tištěných dokumentů, on-line přístupných žurnálů, článků a internetových stránek týkajících se především společností Ford a Škoda Auto.

Hlavním tématem práce je hledání tajemství úspěchu těchto dvou automobilových producentů, díky kterým se obě společnosti byly schopny nepřetržitě udržet na trhu automobilových výrobců po dobu delší než sto let až do současnosti.

Témata týkající se tajemství úspěchu společnosti Ford jsou: 1, Osobnost Henryho Forda, 2, Fordovy zásady produktivní práce, 3, Všeobecně dostupný Model T.

Společnost Ford prošla za dobu své existence mnohými úspěšnými obdobími. Je ale přirozené, že se vyskytly i události, které tomuto automobilovému výrobcí zkomplikovaly situaci a plány. Tato práce zmiňuje dva problémy, a to žalobu pro nedovolené použití Seldenova patentu a antisemitské názory Henryho Forda.

Druhá polovina hlavní části této práce se týká tajemstvími úspěchu společnosti Škoda Auto. Konkrétně jsou zmiňována témata: 1, Osobnosti zakladatelů Laurina a Klementa, 2, Spolupráce s rodinou Hrdličkových, 3, Fúze se společností Volkswagen.

Myšlenka centrálně řízené ekonomiky zavedená v Československu způsobila mnohé potíže v automobilce. Výsledkem bylo, že společnost zaostávala za zahraničními výrobci a nepodařilo se jí navázat na úspěšné předválečné období.

Po prostudování materiálů týkajících obou společností jsem došla k závěru, že ačkoliv firmy pocházejí z velmi odlišných prostředí, mají mnoho společného. Obě společnosti patří do úzkého okruhu automobilových výrobců s více než stoletou tradicí. Firmy byly založeny v době, kdy automobilový průmysl byl teprve ve svých počátcích a byly založeny lidmi, kteří nadšeně sledovali a věřili v technický pokrok. Začátky nebyly lehké, ale jak Henry Fordovi, tak Václavu Klementovi i Václavu Laurinovi se podařilo přesvědčit veřejnost, že naše budoucnost spočívá v automobilech. Jejich obrovské nadšení a snaha, kterou vložili do svých podniků, vytvořily pevné základy, jež umožnily jejich udržení se na trhu až do současnosti.

Henry Ford byl zručný mechanik, ale hlavně schopný obchodník, který světu představil mnoho revolučních nápadů týkajících se zdokonalování výroby. Vždy podporoval technický rozvoj a kladl velký důraz na neustálé inovace.

Ideální kombinace vlastností zakladatelů automobilky Škoda Auto umožnila, aby vozy českého původu mohly být známy pro svou kvalitu a spolehlivost po celém světě. Oba zakladatelé měli své role v továrně perfektně rozdělené a dokonale se doplňovali. Vždy byli odhodláni udělat jen to nejlepší pro svou firmu, což se projevilo v jejich klíčových rozhodnutích o převedení továrny na akciovou společnost a poté o jejím prodeji za účelem zajištění dostatku finančních prostředků pro další rozvoj.

Henry Ford jako první využil masovou produkci v automobilovém průmyslu a ukázal tak celému světu, že jen výroba ve velkém množství je úsporná a umožňuje nabídnout cenově přijatelné zboží co nejširšímu okruhu zákazníků. Jak Ford, tak i Škoda Auto zavedli standardizaci výrobních metod před svými místními konkurenty.

Získat si důvěru a být součástí životů velkého množství lidí skrze své produkty

se oběma výrobcům podařilo. Masově vyráběný Ford, Model T, umožnil obyčejným lidem volně cestovat, což mělo velký vliv na kulturní rozvoj nejen v USA. Škoda Auto představila také svůj lidový vůz, Popular, který se stal po mnoho let nejlépe prodávaným automobilem v Československu.

Další tajemství úspěchu, ve kterém se oba výrobci shodují je jejich schopnost najít a spolupracovat se správnými lidmi a firmami. Aby se původní společnost Laurin & Klement byla schopna udržet na trhu a dále se rozvíjet, došlo k její fúzi se Škodovými závody. Dále automobilka vděčí za velký úspěch dvěma členům rodiny Hrdličkových, kteří významně přispěli k jejímu vývoji a zachování stabilní pozice na trhu. Dalším důležitým partnerem společnosti Škoda se stal německý automobilový výrobce Volkswagen, který domácímu producentovi pomohl vylepšit svůj obraz na veřejnosti a stát se výraznou značkou na trhu automobilového průmyslu.

Po druhé světové válce prošel Ford několika těžkými obdobími. Členové rodiny Fordových ale byli schopni vhodně obsadit manažerské pozice ve firmě zaměstnanci, kterým se pomocí rozšíření nabídky o finanční služby podařilo dostat automobilku Ford zpět na špičku.

Oběma společnostem pomohlo k úspěchu i trochu štěstí a to v situacích, kdy procházely nepříznivými obdobími a byly nuceny přetransformovat svou organizační strukturu i samotnou výrobu. Tyto situace nastaly předtím, než se objevily globální ekonomické problémy, jež měly negativní vliv na celé odvětví. Nabyté zkušenosti pomohly oběma výrobcům být připraveni a překonat nadcházející období recese.

Pevné základy položené tvůrci obou společnostmi, souvislý historický vývoj, sledování technického pokroku, představení revolučních myšlenek a jejich převedení do praxe, řešení problémů a hledání jedinečných řešení, navazování spolupráce s těmi správnými lidmi a společnostmi a hlavně být součástí života lidí po celém světě umožnily společnostem Ford a Škoda Auto uchovat si svou tradici až do současnosti. Tajemství jejich úspěchu nespočívá v žádném kouzle. Obě společnosti jen vždy měly své nápady a schopnosti a jsou si vědomy zodpovědnosti, kterou mají vůči generacím svých zákazníků, zaměstnanců a obchodních partnerů. To je důvod, proč jejich úspěch vychází z tradice a dlouholeté zkušenosti, kterou získali v automobilovém průmyslu a která jim pomůže překonat i současnou nepříznivou situaci ve světě.

Annotation

Author: Šárka Voborová

Department: Department of English and American Studies, Philosophical Faculty

Title: Ford and Škoda Auto – Success Based on Tradition

Thesis supervisor: Joseph Ference, J.D.

Number of pages: 66

Number of characters: 140,502

Number of annexes: 1

Number of works cited: 31

Keywords: automotive industry, Ford Motor Company, automotive assembly line, the Model T, Škoda Auto, Laurin & Klement, the Hrdličkas, merger of Škoda Auto and Volkswagen.

This thesis deals with the secrets of success of two traditional car producers, the American Ford Motor Company and the Czech Škoda Auto. The aim of this paper is to carefully trace and analyse the historical development of these companies and find particular instants which enabled them to maintain their long existence in the motor industry and which will help them to overcome the current unfavourable economic situation.

Anotace

Autorka: Šárka Voborová

Katedra: Katedra anglistiky a amerikanistiky, Filozofická fakulta

Název: Ford a Škoda Auto – Úspěch vycházející z tradice

Vedoucí práce: Joseph Ference, J.D.

Počet stránek: 66

Počet znaků: 140 502

Počet příloh: 1

Počet titulů použité literatury: 31

Klíčová slova: automobilový průmysl, Ford, automobilová výrobní linka, Model T, Škoda Auto, Laurin & Klement, Hrdličkovi, fúze společností Škoda Auto a Volkswagen.

Tato práce se zabývá tajemstvími úspěchu dvou tradičních automobilových výrobců, americké společnosti Ford a českého výrobce Škoda Auto. Cílem této práce je analyzovat historický vývoj daných společností a najít konkrétní okamžiky, které umožnily, aby se obě společnosti udržely na trhu po dobu více než sta let a které budou mít pozitivní vliv i na překonání současné nepříznivé ekonomické situace.

Bibliography

Books:

1. Ford, Henry, and Samuel Crowther. *My Life and Work*. London: William Heinemann, Ltd., 1923.
2. Kožíšek, Petr, and Jan Králík. *L&K-Škoda 1895-1995, 1. díl*. Prague: Motorpress, spol. s r. o., 1995a.
3. Kožíšek, Petr, and Jan Králík. *L&K-Škoda: 1895-1995, Part Two, The Flight of the Winged Arrow*. Prague: Motorpress, spol. s r. o., 1995b.
4. Králík, Jan. *V soukolí okřídleného šípů*. Prague: Grada Publishing, a.s., 2008.
5. Pavlůsek, Alois, and Ondřej Pavlůsek. *Škoda: Laurin & Klement*. Brno: Computer Press, 2004.

Magazine Article:

6. Delbanco, Andrea. "Remembering the Model T." *Time for Students*, October-November 2008, 4.

Articles in Online Journals:

7. Bohatá, Marie. "Škoda Automobilová a.s." *Eastern European Economics* vol. 36, no. 5 (September-October 1998), 26-42, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=1847940&site=ehost-live> (accessed July 23, 2010).
8. "Company Spotlight: Ford Motor Company." *MarketWatch: Global Round-up* vol. 8, no. 10 (October 2009), 13-21, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=44651074&site=ehost-live> (accessed July 23, 2010).
9. Fine, Sidney. "The Ford Motor Company and the N. R. A." *Business History Review* vol. 32, no. 4 (winter 1958), 353-385, Journal Storage Database, <http://www.jstor.org/pss/3111659> (accessed July 22, 2010).
10. Foote, Christopher L., Warren C. Whatley, and Gavin Wright. "Arbitraging a Discriminatory Labor Market: Black Workers at the Ford Motor Company, 1918-1947." *Journal of Labor Economics* vol. 21, no. 3 (July 2003), 493-532, Journal Storage Database, <http://www.jstor.org/stable/3653613> (accessed July 22, 2009).
11. O'Rourke, James. "Bridgestone/Firestone, Inc. and Ford Motor Company: How a Product Safety Crisis Ended a Hundred-Year Relationship." *Corporate Reputation Review* vol. 4, no. 3 (October 2001), 255-264, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=6907146&site=ehost-live> (accessed July 23, 2010).

12. Raff, Daniel M. G. "Wage Determination Theory and the Five-Dollar Day at Ford." *The Journal of Economic History* vol. 48, no. 2 (June 1988), 387-399, Journal Storage Database, <http://www.jstor.org/stable/2121179> (accessed July 22, 2010).

13. Ribuffo, Leo P. "Henry Ford and "The International Jew." *American Jewish History* vol. 69, no. 4 (June 1980), 437-477, http://books.google.cz/books?id=5Ao_Pk5htcIC&pg=PA437&lpg=PA437&dq=ribuffo+henry+ford+and+the+international+jew&source=b&ots=NhSSw39XuE&sig=mgWmYIf2Hr63Vc9Nw77fC7u1T6k&hl=cs&ei=1TBITOTBGcPQ4wbk3bnNDA&sa=X&oi=book_result&ct=result&resnum=3&ved=0CCMQ6AEwAg#v=onepage&q=ribuffo%20henry%20ford%20and%20the%20international%20jew&f=false (accessed July 22, 2010).

14. Wicks, Frank. "The Remarkable Henry Ford." *Mechanical Engineering* vol. 125, no. 5 (May 2003), 50-55, Business Source Complete, EBSCOhost, <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=9634150&site=ehost-live> (accessed July 23, 2010).

15. Wik, Reynold M. "Henry Ford's Tractors and American Agriculture." *Agricultural History* vol. 38, no. 2 (April 1964), 79-86, Journal Storage Database, <http://www.jstor.org/pss/3740673> (accessed July 23, 2010).

Online Book Review:

16. Dicke, Tom. Review of the *Disaster in Dearborn: The Story of the Edsel*, by Thomas E. Bonsall. *Business History Review* vol. 77, no. 2 (summer 2003), 331-333, Journal Storage Database, <http://www.jstor.org/pss/30041160> (accessed July 23, 2010).

Online Newspaper Articles:

17. "Hyundai Passes Ford As World's Fourth Largest Automaker." *U.S. News & World Report, Ranking & Reviews*, August 19, 2009, <http://usnews.rankingsandreviews.com/cars-trucks/daily-news/090819-Hyundai-Passes-Ford-As-World-s-Fourth-Largest-Automaker/> (accessed August 12, 2010).

18. Kerles, Marek. "V Česku jsou čtyři miliony aut." *Zpravodajský server Lidových novin*, July 13, 2007, http://www.lidovky.cz/tiskni.asp?r=moje-penize&c=A070713_153024_ln_ekonomika_hlm (accessed July 22, 2010).

Online Magazine Articles:

19. Drucker, Peter F. "Henry Ford: Success and Failure." *Harper's Magazine*, July 1947, 1-8, <http://www.harpers.org/archive/1947/07/0032978> (accessed July 23, 2010).

20. "Geely Buys Volvo - Status Symbol." *The Economist*, March 31, 2010, http://www.economist.com/node/15825810?story_id=15825810 (accessed July 23, 2010).

21. "Trouble Down the Road." *The Economist*, September 17, 2010, <http://www.economist.com/node/14455669> (accessed July 23, 2010).

Online Documents:

22. About Ford. “*Annual Reports - 2002-2009 Annual Report.*” Ford Motor Company.

<http://www.ford.com/microsites/annual-reports> (accessed July 23, 2010).

23. About Škoda – For Investors. “*Annual Report 2000-2009.*” Škoda Auto. [http://new.skoda-](http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx)

[auto.com/com/about/investors/annual/Pages/Annualreports.aspx](http://new.skoda-auto.com/com/about/investors/annual/Pages/Annualreports.aspx) (accessed July 23, 2010).

24. Research Store. “*Global New Cars.*” Datamonitor. 2009.

http://www.datamonitor.com/store/Product/global_new_cars?productid=976EBAA2-AC4D-413A-AE2B-1A4728D694A1 (accessed July 23, 2010).

Web Sites:

25. About Ford. “Stock Exchange Listings.” Ford Motor Company. [http://www.ford.com/about-ford/investor-](http://www.ford.com/about-ford/investor-relations/investment-information/stock-issues-exchange-listings)
[relations/investment-information/stock-issues-exchange-listings](http://www.ford.com/about-ford/investor-relations/investment-information/stock-issues-exchange-listings) (accessed June 22, 2010).

26. About. “Who We Are.” UAW. <http://www.uaw.org/node/39> (accessed July 23, 2010).

27. Cars – History of Cars. “History of Cars Time Line.” Discovery Channel.

<http://www.yourdiscovery.com/cars/timeline/> (accessed July 23, 2010).

28. Clean Air Act. “History of the Clean Air Act.” U.S. Environmental Protection Agency.

http://www.epa.gov/air/caa/caa_history.html (accessed July 23, 2010).

29. Company Histories. “Ford Motor Company.” Funding Universe.

<http://www.fundinguniverse.com/company-histories/Ford-Motor-Company-Company-History.html> (accessed July 23, 2010).

30. Resources for Science Learning – The Case Files. “Henry Ford.” The Franklin Institute.

<http://www.fi.edu/learn/case-files/ford/index.html> (accessed July 23, 2010).

31. Weird and Wonderful Patents. “George Who?” Brown & Michaels, PC Intellectual Property Home Page.

<http://www.bpmlegal.com/wselden.html> (accessed July 23, 2010).