



ICADE BUSINESS SCHOOL

MASTER IN FINANCE

VALUATION OF INDRA AFTER THE TAKEOVER OF TECNOCOM

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Abstract

This Thesis consists in the valuation of the listed Company Indra Sistemas through the Discounted Cash Flow method. The aim of the study is to decide whether the acquisition of TecnoCom was a right strategic move or not. For that purpose, Indra is analyzed from different approaches, in order to better understand the current situation of the company. Also, the basics of the DCF method are applied so as to reach to a final price. Finally, some concepts of Behavioral Finance are applied, which help to better understand the psychological aspects that affected to the manager team.

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1. Introduction

The present thesis tries to understand whether the takeover of TecnoCom by Indra in 2016 was a right move or not. For that purpose, not only a valuation of the whole company is done, but also an easy approach to the main factors that influenced in the decision-making of the manager team according to the Behavioral Finance principles. The method chosen for the valuation is the Discounted Cash Flow method, which is far from perfect or exact. Forecasts have been done in order to finally get a result, based on the expectations of the company along with the market trends and macroeconomic environment surrounding the main businesses. Thus, it is important to understand that the results showed along the Thesis are derived of personal assumptions of the fate of Indra. In any case, Indra was selected as a case study due to its unique recent takeover situation, complexity and diversification. Also, my interests in the aerospace and defense industry oblige me to choose Indra.

Through the Discounted Cash Flow method, the current share price of Indra is calculated, which represents as a matter-of-fact the present value of the company. It was possible to determine whether the investment was successful or not by understanding the new position of Indra in the market and the key drivers of the industry. In this case, the valuation through multiples was not used, due to the complexity of the company at the time of splitting the revenues per lines of businesses.

Finally, the principles of the Behavioral Finance have been analyzed in order to estimate what were the factors that influenced to the management team at the time of making a decision.

2. Objectives

The aim of this study is the calculation of the present value of Indra through the Discounted Cash Flow method in order to understand whether the acquisition of Tecnocom in November 2016 was a correct move or not.

For that purpose, the most important part is to forecast the expected cash flows of the company, based on recent information. In the case of Indra, it was needed to forecast the company as a two-companies case (Transport & Defense, IT), which increased the complexity of the estimation. Furthermore, the terminal value should be calculated, due to the added difficulty of the estimation of the growth to perpetuity (g) of the company. Also, the Weighted Average Cost of Capital (WACC) should be obtained so as to get the result. The WACC presents some degree of complexity due to the different calculation methods available.

Within the analysis the CAPM model is used as a way to reckon the cost of equity. The CAPM has implicitly the drawback of the systematic risk coefficient (Beta). In any case, in this Thesis only the historical beta has been used to ease the calculation.

The final result is also compared to different situations through a sensitivity analysis, which gives an overall sight of the key drivers of the company. Those mentioned drivers are the responsible of the variations in prices of the company's shares.

Finally, a personal opinion about the main arguments of the manager team is given.

3. Theoretical Framework

3.1 Value Drivers in a Company Valuation

The valuation of a company must reflect a deep study and comprehension of the key value drivers that influence the company sustainability, and how they affect the calculation. Also, the importance of each driver differs from one company to another.

Pablo Fernandez (2013) states that the key factors that affect the share price, and so the company value, are the future cash flows expectations and the shares' expected return. So that, the value drivers are:

- **Future Cash Flows:** The expected growth of the company's cash flows depends on the foreseen growth of company, and on the return on investment. Likewise, the return on investment rely on the operations, assets and taxes, which should be taken into account to succeed in the forecasting.
- **Shares' expected return or Cost of Equity (K_e):** In this case, the cost of equity directly depends on the risk-free rate, which cannot be controlled by the company. Also, cost of equity relies on the risk of the operating risk and the financial risk.
- **Market knowledge:** The term Market Knowledge refers not only to the well and clear communication and transparency with the markets themselves, but also with analysts, rating agencies, and so on.

3.2 Company Valuation Methods

The company valuation is an exercise that requires of some technical knowledge about the different methods that are possible to be applied. However, as everything in life, the exercise improves with the practice. It is hard to identify which is the best method as some are conceptually incorrect. Although, they are frequently used within financial analysts. The conceptually correct methods are those that rely on the discounted cash flows of the company, which are based on the expectations of several variables. Dividends and debt are considered as valuable assets in discounted cash flows methods. Multiples method, for example, is considered as an incorrect calculation, but frequently used to complement discounted cash flows.

Price and value must be well differentiated before any valuation. Although it seems to be easy to understand, it is an essential part in any negotiation. Acquirer and buyer tend to evaluate the company in different ways. Controversy arises as valuation depends on subjective factors such as, opposite future market and company

expectations, strategy or economies of scale. That is why, although value is normally different, the price should be negotiated.

According to Pablo Fernandez (2013), valuation methods can be divided in six groups: Balance Sheet Methods, Methods based on the Profit and Loss account, Mixed Methods, Methods based in the discount of the cash flows, Cash Value Added and Options Valuation. In this Thesis only the first four methods are explained, as neither Cash Added Value nor Options Valuation were considered to be used. So that;

Balance Sheet Methods: These methods try to calculate the company value through its book value. Balance Sheet is studied in order to calculate the company assets value. Subjective valuation does not fit in this method, as expectations and company evolution is not considered. As a result, Balance Sheet methods are seen as non-realistic calculation, giving only the current value of the company, regardless its potential development. Balance Sheet Methods category encompasses five methods:

- Book Value
- Adjusted Book Value
- Terminal Value
- Substantial Value
- Book Value vs Market Value

Terminal Value is the only one that is considered as correct for investors, as it does not depend on expectations. Also, Market Value will never be equal to Book Value.

Methods based on the Profit and Loss account: These methods are completely dissimilar to the previous ones i based on the Balance Sheet. P&L methods try to calculate the value of a company by comparing different parts of the results with, for example the revenues. As a result, we normally obtain a ratio, which multiplied by the value of sales results in the company value. Multiples valuations are very common thank to its facility to be applied, and can be compared with others with ease. Among others, the key multiples ratios are:

- Price Earnings Ratio (PER): It is also known as the “price multiple” and it basically measures the current share price to the earnings per share (EPS). The ratio is multiplied by the Net Profit so as to obtain the company value. It is also compulsory to understand the relation between the P/E ratio, the shareholder’s expected return (K_e), and the forecasted cash flow of the company. The relation will be further detailed in the following points of the Thesis. The formula is:

$$\text{Company Value} = P/E * \text{Net Profit}$$

- Dividends value: According to this method, the value of the company directly connected to the relation of the value of one share and the amount in dividends per share expected to receive. For the calculation, we can either consider the dividends constant to maturity (growth $g=0$) or with a steady growth throughout the time. Therefore, the formula would be the following:

$$\text{Share Value} = \frac{\text{Dividends per Share}}{K_e - g}$$

Curiously, a higher pay back dividends ratio does not mean a revamp in share prices. The reason is straightforward. Those companies paying more in dividends tend to spend less money in investment. Consequently, growth may not be.

- Price/Sales Multiple: Sales multiple follows the same structure than every multiple. Thus, it consists in the calculation of the value of a company by multiplying the value of the sales by a number (*ratio*). The formula is simple. As the name says, is the relation between Share Price and Sales. However, the formula can be divided in two:

$$\text{Price/Sales} = \frac{\text{Price}}{\text{Net Profit}} * \frac{\text{Net Profit}}{\text{Sales}} = P/E * \text{Price/Sales}$$

Mixed Methods: These methods are based in the calculation of the Goodwill. The Goodwill is a subjective value that corresponds to the extra value of the company upon its net assets value. Mixed Methods are considered dynamics as they sum the value of the net assets and a variable part, Goodwill. Goodwill is calculated thanks to items such as, customer portfolio quality, strategy, brand value, etc... Thus, not only the book value can give a price, but also the Goodwill, which varies depending on the industry, sector, and acquirer perception of intangible assets. Normally, it is said that mixed methods lie in the future benefits that the valuated company can generate for the acquirer. Some methods are the following:

- Classic Valuation method
- UEC simplified method
- UEC method
- Indirect method
- Direct method
- Buy method

Methods based in the discount of the cash flows: Although the mixed methods described in the last section have been widely used in the past, nowadays they are not considered as conceptually correct. Nonetheless, the discounted cash flows methods have been increasing their popularity as they are contemplated as correct, from a conceptual point of view.

Discounted cash flow methods (DCF) try to determine the value of a company through the forecasting of the expected future cash flows. Hence, the share price derives from the capability of the company to generate those expected cash flows for the shareholders. Consequently, the Discounted Cash Flow model is acknowledged as the most appropriate to conduct a company valuation.

DCF models lie on the precise and meticulous study of the future situation that the company can expect. Forecasts arise as the most important tool for the analyst, who has to perform a detailed research of every financial item susceptible of change in the future. Those financial items correspond to the operations of the company, as it is the case of; sales growth, costs, working capital, investments and so on.

There exist several types of cash flows, but they all start from the same formula:

$$Present\ Value = \frac{CF_1}{1+k} + \frac{CF_2}{(1+k)^2} + \frac{CF_3}{(1+k)^3} + \dots + \frac{CF_n + TV}{(1+k)^n}$$

Where;

- CF_x : Generated cash flows of each period of time.
- n: The number of periods considered.
- TV: Terminal value of the company in year “n”.
- k: Discount rate selected for the risk given.

Regarding to the Terminal Value (TV), it gathers the value of the company from period “n” on. It would not be correct to forecast long periods of time, as the longer the period the lower the present value. Thus, it is common to ignore or minimize those far periods. The formula of the Terminal Value is the following;

$$Terminal\ Value = \frac{CF_n \cdot (1+g)}{(k-g)}$$

Terminal Value is seen as an easy way to calculate the cash flows from period “n” and for an indefinite period of time. So that, a constant growth rate (g) is applied in the formula.

3.3 Types of Cash Flows generated by a company

Before starting the valuation, it is recommended to know what are the different types of cash flows generated by a company during the operating cycle.

Cash Flows	Discount Rate Applied
Shareholder's cash flow	k_e or shareholders' expected return
Debt cash flow	k_d cost of debt or expected return on debt
Free Cash Flow (FCF)	WACC Weighted Average Cost of Capital
Capital Cash Flow (CFC)	WACC before taxes

Table 1 - Types of Cash Flows

The table sums the most important types of cash flows generated by a company. Each of them follows the same generic formula before explained. However, the proper discount rate must be applied to well-obtain the final result.

Another crucial concept needed to be understood is the difference between the Accounting Balance Sheet (ABS) and the Financial Balance Sheet (FBS). When talking about the assets of a company in DCF models, it means that the financial assets of a company are composed of Net Fixed Assets (NFA) plus the Operational Funding Needs. So that, the financial liabilities would encompass the Equity and the Net Financial Debt which is the sum of current and non-current financial debt. Consequently, the Value of the Company is the Equity Value plus the Outstanding Debt.

3.4 Discounted Cash Flow Methods (DCF)

The Discounted Cash Flow consists in the discount of the forecasted cash flows of a company at a discounted rate. There exist several methods to calculate the result of the discounted cash flow. However, it is important to understand that all of them must result in the same value, as the value of the company depend on the initial hypothesis and not in the calculation method. They all differ just in the forecasted cash flow for the calculation. According to Pablo Fernandez (2013), we can find at least ten different methods to calculate the final valuation.

- 1- Free cash flow discounted at the Weighted Average Cost of Capital (WACC); The share value in this case would be the present value of the equity cash flow actualized to the expected shareholder's return. As a matter-of-fact, the present value of the debt would be the expected debt cash flows discounted at the cost of debt. Then, the sum of the debt (D) and the shareholders equity (E) is the result of the free cash flow that the company is expected to generate.

The cash flows generated are discounted at Weighted Average Cost of Capital (WACC).

$$PV = E + D [WACC; FCF]$$

And;

$$WACC = \frac{(E \cdot K_e + D \cdot K_d \cdot (1 - t))}{E + D}$$

Thus, the K_e is the cost of equity or required return on equity, K_d is the cost of debt, "t" is the tax rate applied, D is the market value of the Net Financial Debt and E is the market value of the equity.

- 2- Equity cash flows discounted at the required return on equity; The ECF or Equity Cash Flow is the cash flow generated after investments in fixed assets needed for the business, working capital, repayment of the financial debt and principal. To actualize the equity cash flows it is important to remember that we are valuating the shares of the company (E). So that, the discount rate must be the cost of equity or required return on equity (K_e).

When forecasting, the expected cash flows must match with the available cash for the shareholders. To find the value of the company as a whole, which is the sum of net financial debt (D) and equity (E), both E and D should be summed. In the following sections the calculation of the cost of equity will be explained.

- 3- Capital Cash Flows (CCF) discounted at Weighted Average Cost of Capital before taxes ($WACC_{BT}$); The capital cash flow (CCF) is the cash flow available to debtholders and shareholders. Thus, the CCF is equal to the sum of the Debt Cash Flow (CFd) and the Equity Cash Flow (ECF). The CCF is discounted at the $WACC_{BT}$.
- 4- Adjusted Present Value (APV); The adjusted present value indicates that the value of the debt (D) plus the value of the shareholders' equity (E) is equal to the value of the unlevered company's shareholders' equity, plus the value of the tax shield (VTS).

$$E + D = V_u + VTS$$

- 5- The business's risk-adjusted free cash flows discounted at the required return on assets (K_u); Here, the present value of the business risk-adjusted free cash flow discounted at K_u is given by the sum of the shareholders' equity (E) and the value of the debt (D).

- 6- The business's risk-free equity cash flows discounted at the required return on assets (K_u); The value of the shareholders' equity (E) is the present value of the expected business risk-adjusted equity cash flow discounted at the required return on assets K_u .
 - 7- Profit form Equity discounted at the required return on equity (K_e); The value of the shareholders' equity (E) is the equity's book value plus the present value of the expected economic profit discounted at the required return on equity (K_e).
 - 8- EVA (Economic Value Added) discounted at the Weighted Average Cost of Capital (WACC); The value of the debt (D) plus the value of the shareholders' equity (E) is the book value of the shareholders' equity and the debt plus the present value of the expected EVA, discounted at the Weighted Average Cost of Capital (WACC).
- The EVA is the Net Operating Profit After Taxes (NOPAT) less the company's book value multiplied by the Weighted Average Cost of Capital (WACC).
- 9- The risk-free rate-adjusted free cash flows discounted at the risk-free rate; The value of the debt (D) plus the shareholders' equity (E) is the present value of the expected risk-free-adjusted free cash flows that will be generated by the company, discounted at risk-free rate (R_f).
 - 10- The risk-free-adjusted equity cash flows discounted at the required return on assets; The value of the shareholders' equity (E) is the present value of the expected risk-free-adjusted equity cash flows discounted at the risk-free rate (R_f).

3.5 DCF Theories

Quoting what Pablo Fernandez (2013) states about the 9 theories applied to the Discounted Cash Flow models;

- Fernandez (2004). Assumes that there are no leverage costs and that the risk of increases in debt is equal to the risk of the free cash flow.
- Damodaran (1994). To introduce leverage costs, Damodaran assumes that the relationship between the levered and unlevered beta β is:

$$\beta_L = \frac{\beta_u + D \cdot (1 - T) \cdot \beta_u}{E}$$

Instead of the relationship obtained in Fernandez (2004);

$$\beta_L = \frac{\beta_u + D \cdot (1 - T) \cdot (\beta_u - \beta_d)}{E}$$

- Practitioners' method. To introduce higher leverage costs, this method assumes that the relationship between the levered and the unlevered beta is:

$$\beta_L = \frac{\beta_u + D \cdot \beta_u}{E}$$

- Harris and Pringle (1985) and Ruback (1995). These theories assume that the leverage-driven value creation or value tax shields (VTS) is the present value of the tax shields ($D K_d T$) discounted at the required return on the unleveraged equity (K_u). According to them;

$$VTS = PV \cdot [D K_d T; K_u]$$

- Myers (1974), who assumes that the value of the tax shields (VTS) is the present value of the tax shields discounted at the required return on debt (K_d). According to Myers;

$$VTS = PV \cdot [D K_d T; K_d]$$

- Miles and Ezzell (1980). This theory states that the correct rate for discounting the tax shield ($D K_d T$) is K_d for the first year, and K_u for the following years.
- Miller (1997) concludes that the leverage-driven value creation or value of the tax shields is zero.
- With-cost-of leverage. This theory assumes that the cost of leverage is the present value of the interest differential that the company pays over the risk-free rate.
- Modigliani and Miller (1963) calculate the value of the tax shields by discounting the present value of the tax savings due to interest payments of a zero-free debt ($T D R_f$) at the risk-free rate (R_f). Modigliani and Miller claim that;

$$VTS = PV \cdot [R_f; DT K_d]$$

3.6 Steps in a company valuation through DCF

In order to value a company through the DCF model some steps are needed to be followed:

- Historical and strategic analysis of the company and the sector: The financial analysis must show the evolution of the profit and loss account, the balance sheet, cash flows generated by the company, investments and ways of financing of the company. Also, the financial health of the company must be studied. In the strategic analysis think such as, the sector evolution, competitive position of peers, value chain identification and value drivers of the company within the industry in which is operating.
- Future cash flows projections: The financial expectations of the company must be identified through the profit and loss account and the balance sheet, cash flows generated so far, investments and financing. Also, the terminal value of the company should be calculated to perpetuity along with a sensitivity analysis. The strategic plan is also important to bear in mind as is the ideal plan that the corporation has as objective. Thus, the provisions about the sector evolution, and competitive position in the sector is fundamental. Furthermore, all the forecasted data must be aligned with the historical results of the company.
- Estimation of the cost of capital of the company, or expected return: here it basically depends on the method used in the valuation. Normally it is used the Weighted Average Cost of Capital in the DCF method, which gathers both the cost of debt and the cost of equity.
- Discount of the free cash flow generated at the proper discount rate.
- Interpretation of results.

3.7 Behavioral Finance affecting the decision making

Behavioral finance is a relatively new field in the finance world that has emerged to fill the gaps of the known "Modern Finance". This part of the Thesis will be used to better

understand what were the arguments followed by the manager team of Indra at the time of acquiring Tecnocom.

Within Behavioral Finance we can find several theories that studies the irrational behavior of an investor when facing an investment possibility. Each theory focuses in a different part of the finance scope, thus just a few theories are going to be used in this Thesis.

Bounded Rationality: Simon (1957) proposed the notion of Bounded Rationality, which determines that people are not fully rational when making decisions and do not optimize but rather satisfice when arriving to a decision. Then, Simon states that people just gather some not all information, and stop when they have reached satisfaction. It is a common affection that happens to decision makers, as they rather to satisfy than optimize.

Behavioral Approach to Asset Pricing: Shefrin (2005) concluded that investors do not make decisions in an unbiased way. In an asset pricing method as the CAPM investor can be influenced by the sentiment. It is necessary then to have a well-defined measure of sentiment with an impact that can be traced on market prices and risk premium. As an example, we have the dispersion among analysts' valuations. In the CAPM the discount rate can be easily manipulated thus, a real discount rate must be the sum of the risk-free rate and the fundamental premiums based on the sentiment-based risks. Then, investors tend to commit errors based on either cognitive or emotional errors., better known as behavioral biases.

Behavioral biases are classified as cognitive errors or emotional biases. Cognitive errors are basic statistical, information-processing, or memory errors that cause the decision to deviate from the rational decisions. Emotional biases arise spontaneously as a result of attitudes and feelings than can cause the decision to deviate from the rational decisions of the traditional finance. Normally, cognitive errors are considered as easier to be corrected or moderated, as at the end they do not result from the emotional or intellectual predispositions toward any judgement. On the other hand, emotional biases stem form impulse feelings and perceptions. These unreasoned judgements are more complicated to correct. The best way to correct the emotional biases is to identify them and to adapt to it. The cognitive-emotional approach helps us to determine when and how a decision was thought.

There are several types of cognitive errors such as, believe perseverance biases, conservatism bias, confirmation bias, representativeness bias, illusion and control bias and hindsight bias. However, they do not seem to be the primary reason of a well-studied acquisition. Consequently, those that may have affected in the decision making of the manager team are the emotional biases. According to Ahmed Ibrahim (2014) there exist 6 different emotional biases:

- **Loss-Aversion Bias:** It is a bias in which people tend to highly prefer avoiding losses as opposed to achieving gains. Losses are normally more powerful than

gains. Thus, rational investors are considered to accept more risk to gain more money rather than to mitigate losses.

- **Overconfidence Bias:** It is a bias where people demonstrate unwarranted faith in their own intuitive reasoning and cognitive abilities. The overconfident normally make people underestimate the information, what makes this bias have also a part of cognitive error.
- **Self-Control Bias:** It is the bias where people fail to act in pursuit of their long-term goals because of lack of self-discipline. This behavior can finish in a high short-term result or utility and disastrous long-term utility.
- **Status Quo Bias:** It is an emotional bias that force people to do nothing instead of making a decision to change thinks. People feel more comfortable keeping than changing.
- **Endowment Bias:** It is an emotional bias in which people tend to overvalue an asset when they hold a position. Then, it is considered to have an added-value, making investors resistant to selling.
- **Regret-Aversion Bias:** It is the emotional bias in which people avoid to make a decision that can end up in a poorly outcome. It can either has the dimension of decisions taken or decisions that could have been taken.

4. Business Overview

4.1 Indra Sistemas SA

Indra is a global consulting and technology company, headquartered in Madrid, Spain. Indra profits from a worldwide leading position offering added-value solutions and services in both the IT and defense industries. The goal of the company is to enhance the processes, efficiency, profitability of their customers, in order to reach the technological differentiation.

Indra was born in 1993, after the merger between Ceselsa and the Inisel Group. Both companies were specialized in the defense and IT sectors, and the result was Indra, a company initially owned by the Spanish state. During the Spanish companies' privatization era in 1993, the state underwent an Initial Public Offering (IPO), by which the SEPI (Sociedad Estatal de Participaciones Industriales) sold around 66% of Indra's shares. SEPI is a public entity with the aim of managing the Spanish state's shares portfolio of industrial Spanish companies.

Throughout the financial crisis in 2007 Indra suffered a huge reduction in its sales, principally due to the strong dependence on the Spanish industry and to some unlucky decisions of the management team. Indra tried to overcome the situation with an extreme international expansionary plan, with the goal of growth at any price. The result was a critical situation in 2015. The consequence was a change in the management team, and a sudden write-off of most of non-profitable projects and assets that had a value of around 1bn €. This event started the new strategic plan of the company, focusing in a more healthy and profitable growth. Currently, Indra is a very diversified company that operates in more than 140 countries, with 34.000 employees and with revenues of 2,7bn €.

Indra is a diversified Company which also has other subsidiaries such as TecnoCom and Minsait. In order to give a well detailed description of the different markets where Indra is operating, it is interesting to divide the company in two segments. First, we have the Transport and Security market, which represented a 40% of the total revenues of the company. Moreover, we differentiate also the IT sector which was the 60% of the annual revenues in 2016.

Indra is currently one of the leading consulting firms in different industries around the world. It is immersed in important partnerships providing solutions to the core business operations of its clients. The key industries where Indra is present or offering solutions and services are classified in two big groups. The first one is Transport and Defense (T&D), where Indra offers proprietary solutions internationally. The other

group is the Information Technology, which is mainly present in Spain and Latin America. The position of the IT business has been strengthened thanks to the takeover of TecnoCom. Transport and Defense, in turn encompasses the verticals Defense, Security, Transport and Traffic, offering high added-value solutions and end-to-end solutions. In the same way, IT business encompasses the verticals Telecommunication and Media, Financial Services, Public Administration and Healthcare, and Industry and Energy. In IT, cutting-edge technological services are offered.

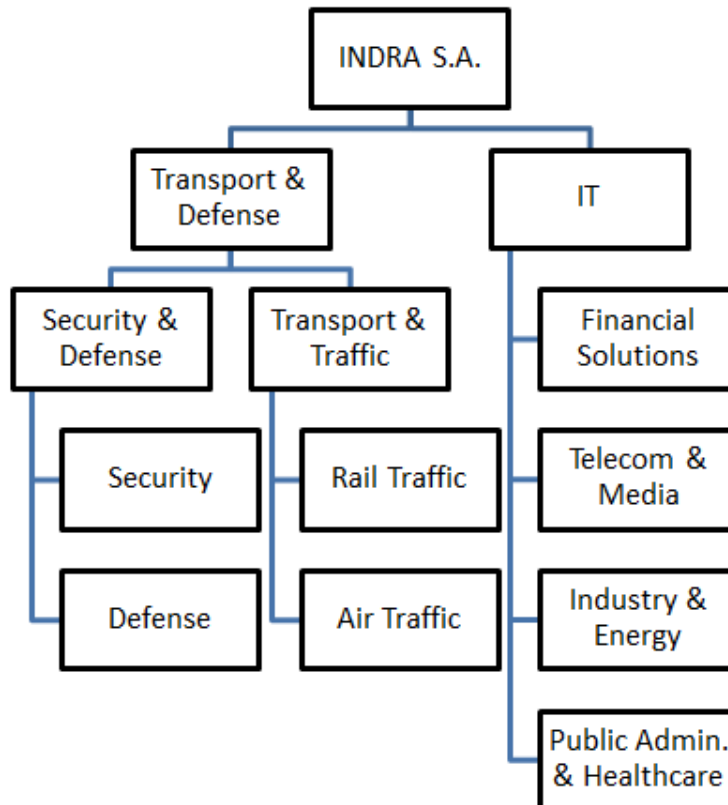


Figure 1 - Indra Sistemas Scheme

The Transport & Defense line of business counted the 39% of the revenues of the company in 2017. In turn, the Transport & Traffic vertical was the 19% of the revenues, while Defense & Security 20%. In the IT division, which represented the 61% of the revenues in 2017 in divided as follows; Energy & Industry 16%, Financial Services 20%, P.A & Healthcare 17% (although it varies depending on the electoral years) and Telecom & Media 8%. All of them in 2017.

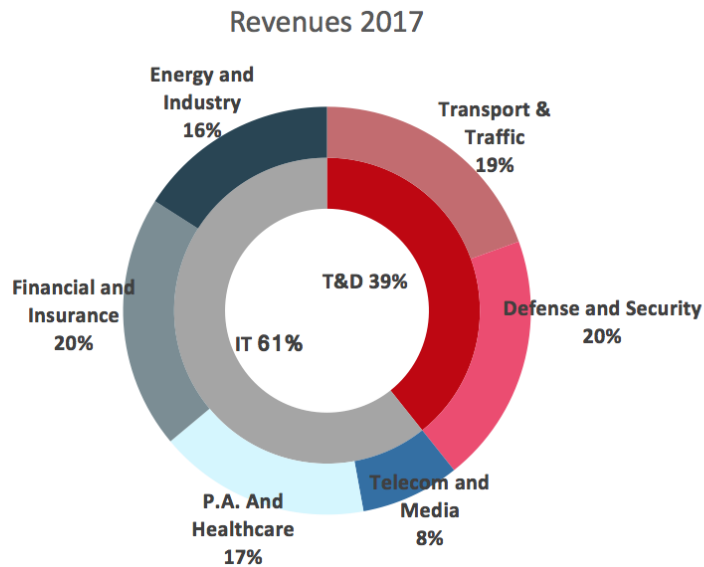


Figure 2 – Revenues by vertical 2017

Along with all the businesses above described, Indra counts on Minsait. Indra's Minsait is the company or unit that addresses the challenges faced by the digital transformation.

Indra is a company focused in the creation of wealth through the innovation. In order to achieve the goal Indra proposes the offering of solutions in its line of businesses consultancy and Technology solutions. Thus, solutions such as strategy and conceptualization are carried out to the final development of the solution itself. Also, it is offered efficiency through IT Outsourcing or Business Process Outsourcing (BPO). These outsourcing services create a cost reduction as well as value-added advantages thanks to:

- New models for the supply of services.
- The vertical of our range of solutions.
- The improvement in our delivery models.
- A range of complementary services.
- The inclusion of social and environmental values in our solutions and services.

The Innovation model that Indra has launched is an open, agile and flexible strategy to enhance their capabilities in order to capture attractive ideas. Innovation presents also an innovation life-cycle which has the Innovation committee as a governing body and the R&D Area, giving support and collaboration. The four key objectives of the Innovation Model are:

- Convert Innovation into the strategic lever that differentiates its offering.

- Focus Innovation on responding to strategic business needs.
- Become a benchmark of Innovation and a hub that attracts startups.
- Capitalize on internal talent for generating differential and innovative initiatives.

Meanwhile, Minsait is the unit in charge of the digital transformation challenge resulting in rapid and tangible results. The unit is divided in four business lines; business consulting, digital technology, proprietary digital products and cybersecurity.

4.2 Business Lines

4.2.1 Transport & Defense (T&D)

The Transport and Defense unit contain the verticals Defense, Security and Transport and Traffic. According to the company results throughout the last years, these verticals are the most profitable resulting in high margins for the company. Although the workload is not as important as in the IT business unit, the high-quality solutions offered are very profitable for Indra. In order to better explain the whole line of business the different industries are explained below. Defense & Security covers the industries Defense, Simulator and Security. Whereas, the Transport & Traffic unit contains the industries Airports, Airlines, Air Traffic and Rail Traffic.

- **Defense:** As a result of the rapid development of the technology within the defense industry, countries and Defense and Interior Ministries have had to invest in fast changing technological solutions so as to remain as defense leaders. Rising vulnerability of the countries has been the main driver of this vertical in last decades. Indra offers global, integrated solutions thanks to its ongoing investments in technology. Therefore, cutting-edge technology products have become the jewel in the crown. The systems and products developed by Indra fulfill the requirements and needs of every type of environment, whether it is land, sea and air. Examples of each environment are the following; VCR 8x8 Combat Vehicle in the ground defense level, new generation of sensors and electronic warfare systems in the sea and the Galileo program, satellite communication systems or Air Defense integrated solution for the airspace surveillance.
- **Simulation:** Indra is one of the largest simulator manufacturers in the world, reaching to more than 23 countries in the five continents, and with more than 200 simulators delivered. Indra develops and delivers simulator solutions in the civil and military markets with the best qualifications existing. Simulators include aircrafts, helicopters, naval and ground vehicles. This is the result of a continuous research and development resulting in products seen as a benchmark in the industry, helping clients to achieve adequate solutions for

their obligations. Nowadays and as reported by Indra, they are the top company in developing helicopters simulators, both, for civil and military customers.

- Security: In line of the emerging vulnerability above described, a hearty security is needed to protect the society. The new entrants in the threats side of the business are constantly evolving, obliging Indra to render security management. Indra creates comprehensive land and maritime surveillance systems protecting borders against illegal immigration and drug trafficking. Cybersecurity is also developed in this vertical, giving a flexible, open and tailor-made solution.
- Airports: Due to the increasing number of passengers arriving to the airports worldwide, Indra offers technological solutions that seek to enhance the fluidity and efficiency of the airport management. This includes IT solutions for terminals, taxi areas and runways, and navigation and air traffic control. ATM solutions had always been part of the Airports vertical, however, due to the rapid development of the ATM business in Indra we now consider it as a stand-alone vertical.
- Air Traffic Management (ATM): The ATM vertical has become one of the most profitable of the company resulting in high margins, reaching XXX in 2017. Cutting-edge solutions have been developed in order to meet the requirements of the customers around the world. The advanced automated air traffic control system is one the best positioned products that meet the standards set by the International Civil Air Organization (ICAO) and Eurocontrol. Indra is continuing consolidating its positions in America and Asia-Pacific. Also, Indra manages the air civil sky of Spain, United Kingdom and Germany. China air civil sky is controlled by the ATM Indra's solutions in more than a 60% country's air space. It is also interesting to highlight that Indra is a major developer in the SESAR program, which is the technological milestone of the Single European Sky.
- Rail Traffic: Indra is considered as a benchmark in the Rail Traffic business due to the project High Speed Train Medina-La Meca carried out in the last years. The project has resulted in an enhancement of the international and world-class reputation of the Spanish technology. Indra also offers solutions in Spain, Lithuania, Colombia, China, USA, United Kingdom and Morocco. Among the main aspects developed by Indra we find; Railway operator solutions, Station management solutions, tunnel security or smart communications and networks.

4.2.2 IT

Information Technology business has been changing rapidly in the last decade. Furthermore, the appearance and inclusion of the new disruptive startups, fintechs and insurtechs have aggravated even more the problem. These types of disruptive companies along with the high investments made by the well-known competitors

supposed a drastic reduction in margins and profitability. Competitiveness has rocketed in the last 4 years, and the expectations in the market are far from a consolidation.

In these terms Indra is working now. The resulting strategy followed by Indra was to acquire TecnoCom in order to consolidate the Spanish IT market and to boost up the LatAm one. Moreover, as it was explained before, Indra gathered all the new information management technologies (Big Data, Cloud, Blockchain) in one company, Minsait. Minsait is nowadays a reference in the information management industry.

The IT business is divided in four verticals; Financial Services, Telecommunications and Media, Industry and Energy, and Public Administration and Healthcare.

- **Financial Services:** The main goal of the vertical is to enhance the efficiency of the daily miscellaneous transactions that are time-consuming for the customer. Indra is considered a strategic partner for both big banks and insurance groups in the competition against disruptive companies. The main services are given through consulting services, banking BPO and technological outsourcing. Innovation is the milestone of the whole vertical, which is focused in three pillars; consulting, proprietary solutions, and services applied with Big Data technology. The main products are implemented in payment methods, core banking and expense management. More than 2000 high-specialized-knowledge projects per year are done by the vertical especially in Latin America, enhanced thanks to TecnoCom, Europe and Asia-Pacific.
- **Media:** Consulting services are offered to struggle the new technologies era. Thus, hand-to-hand products are created for each customer in order to them move to a more specific niche. Specific Business Solutions are used on the vertical. As an example, audiovisual production, production and schedule management system, evolution to content broadcasting companies, audiovisual content, etc. Prisa Group plays a part in the Indra's portfolio.
- **Telecommunications:** Telecom vertical has set as an important line of business for Indra, thanks to its profitability and the well-known brand name gained in Spain, LatAm and Europe. Indra offers strategic, technological and functional consulting services to enhance both sales and operational issues. The key solutions are the Business Support System (BSS) and the Operations Support System (OSS), which are flexible and scalable to adapt to further events.
- **Industry:** Indra possesses a wide value-added offer that covers the whole life cycle of the business information technology. Systems and process operations outsourcing is applied for different industries, such as, industrial and consumer markets. Sectors such as, real estate, car manufacturing or commercial distribution are the main customers. Indra counts with the Hungarian Football Federation or NH Hotel Group as the main projects.

- **Energy:** Indra gathers both knowledge of the business and technical capabilities, offered through consulting services for energy companies in the electricity, gas, oil and water sectors. Entire value-chain is covered with upstream and downstream solutions, focused in distribution optimization.
- **Public Administration:** The PPAA vertical is considered as a special and seasonal vertical that provides peaks of revenues to Indra. It shows a high dependence on the election processes occurring from time to time. The sector is facing also huge challenges that Indra tries to solve through the implementation of cloud solutions, digitalization, automation, shared service centers creations or process simplification. Indra has two key projects leading the vertical which are the e-government and the smart city concept. The e-government solution helps to provide more efficient public services. While the smart city concept has been already implemented in A Coruña, and tries to connect the sensors across the city and the innovative urban platform.
- **Healthcare:** Indra helps healthcare regional centers to implement a more sophisticated health data management system, which enable a fast and dynamic management and interaction of health staff. Examples can be, medical appointments arrangement or access to medical records. Accessibility, sustainability and interoperability are the main targets sought in the vertical. According to the corporative webpage, Indra is present in more than 5600 hospitals and health centers around the world.

4.3 Strategic Plan

Indra suffered a deep internal crisis that led to a change in the management team along with the implementation of a new strategic plan. By 2015, Indra hit rock bottom in terms of financial sustainability. The company found itself in the middle of a critical situation, where had to face the collapse of sales and margins. Also, the leverage ratio passed from 150m € in 2007 to 660m € in 2014, reaching a 6.6x NFD/EBITDA ratio in 2015.

In July 2015 Indra presented its new strategic plan, which encompassed the route map to the financial stability. The strategic plan focused in the economic growth from 2015 until 2018 and includes a set of strategic ideas aiming to improve competitiveness, sustainable growth and profitability.

The strategic plan is based on five pillars:

- **Cost efficiency** (of c. €180m – €200m), which has been achieved on the back of headcount reduction (c. 30,000 employees) and a cut on dividends.
- **Products and projects portfolio**, reorganizing their business portfolio through the prioritization of high value-added products and projects, as well as an increase in standardization.

- Go-to-market strategy, aimed at increasing profitability and cross-selling activities. Delivery model, through product standardization, improvement of client experience and minimization of errors.
- Growth in new businesses, such as growth in new digital businesses achieved through the launching of Minsait.
- Cultural change to be more focused on profitability, by setting variable compensations aimed at cash-flow generation.

Also, the strategic plan included some financial goals in order to tackle the pillars described above:

- An average organic sales growth between 2,5% and 4,5% over 2014-2018.
- EBIT margin between 10% and 11% by 2018, considering the 6,9% EBIT margin resulted in 2014.
- Free Cash Flow (FCF) generation of 200 million Euros by 2018.
- An improvement of the Net Debt/EBITDA ratio by 1x by 2018.

For that purpose, Indra started to expanding internationally aggressively, at the expense of profitability in the FCF generation.

On November 23, 2017, the Board of Directors of Indra released the new strategic plan for the period 2018-2021. It seeks the reorganization of the business based on the segregation of the IT line of business. According to the meeting information, the segregation of the IT will be composed and supported by:

- Supply and marketing activities of proprietary solutions, which are the technologies and solutions developed within the parent company, and sold to third parties. Also, third party solutions that Indra is able to implement.
- Minsait will be the technological division of the company, specialized in digital solutions.
- Every outsourcing activity related to the IT services products will be gathered in the new line of business called CDG ITO.
- Creation of new line of business called CDG's devoted to the development of software.

Also, dividend payments were announced during the meeting, along with a reaffirmation on the strategy of CAPEX increase and the expectations of a 10% EBIT

margin. However, the news was not well received by the market, where Indra's stocks prices suffered a 3% decrease with a flat IBEX 35.

4.4 Takeover of Tecnom

Tecnom is the perfect case of a company that had changed its line of business completely. It was founded in 1967 by Banco Urquijo, private bank which is currently owned by the Santeneder Bank, and IB-Mei Italia. By that time Tieconom was known as IB-Mei Española which business was the manufacturing of washing machines engines. In 1987 the company entered in the Madrid Stoch Exchange.

From 1998 the company started its diversification in telecom networks by acquiring Euroinsta. In 2000 changed its name to Tecnom. This was starting year of the change as Tecnom was able to sign a contract with the Mero of Madrid in order to develop the mobile network. From that year the company began its path in the IT services sector, leaving behind its previous business in manufacturing.

An important event occurred when Tecnom launched its new strategic plan in 2005. They focused in becoming in the major player in IT services in Spain through the acquisition of several companies such as, Eurocomercial, Open Solutions or Scorpion. Tecnom entered in the card transaction processing business acquiring ProceCard, a IT Dominican Group. They expanded the business in Colombia.

In 2016 the company presented its strategic plan with the aim of:

- Annual sales growth of 7.5-10% between 2015 and 2018.
- EBITDA margin target of 7.5% over 2018.
- Financial leverage less than 1xEBITDA over 2018.

Tecnom was seen as an opportunity to consolidate the IT Spanish market, with the goal of unlocking the economies of scale. Indra's strategic move is justified as:

- Built up the leadership on the IT services market in Spain
- Strengthened the in the financial services industry.
- Reduction in dependence on administrations.
- Increased the possibility of cross-selling services.

Indra announced its intention to launch a Voluntary Tender Offer (VTO) over TecnoCom on 29th November 2016 for the 100% of the share capital of the company. The transaction finally took place on 7th April 2017. The process fulfilled with all the numbers announced by Indra in November 2016. The operation was financed with a 60% of cash and 40% of Indra's shares. The acquisition valued TecnoCom in 4,25 €/share or 338 million euros. The premium payed was of 12% over the price of the TecnoCom share by that time. The expected results of the transaction are:

- Enhancing the operating scale of Indra, giving a result of high value creation.
- Increase of the operating leverage in the IT financial services vertical.
- Revenues and operational synergies of 41 million euros.
- Consolidation of the Spanish IT market, expecting an increase of 39% in the revenues.
- Scalability of the delivery model of Indra.
- Significant boost to the Financial Services vertical, due to the consolidation of the market and the value-added products development.
- Rapid penetration in the payment systems business dominated by fintechs, especially in Spain and LatAm.
- Development of cross-selling and up-selling payment methods empowering Indra in the digital transformation.

5. Industry Overview

Indra is immersed in a very complex situations due to, in part, the high diversification of its businesses. Both T&D and IT sectors are facing the challenges of the competitiveness and globalization. They are, however, doing it in very different ways. First and foremost, Transport & Defense sector is getting more and more competitive advantage with very specified and cutting-edge solutions worldwide. Thus, an enhancement of the company brand name has been experienced, consolidating the international presence of the company. On the other hand, arising disruptive technologies in the IT sector are defying the whole industry, regardless the type of solution or service offered. This increasing competitiveness is driving the industry to a more M&A focused one, aiming to maintain the leading positions lost for the startups.

5.1 Market Trends

The key market trends identified in this Thesis are the following:

When talking about the Defense & Security sector, it is important to understand the emergent competitiveness that is appearing in the market. More sophisticated products are demanded in the industry, obliging suppliers (Indra) to evolve towards a technological tailor-made portfolio. Long contracts are vital in order to maintain the sustainable competitive advantage. Hence, negotiation country-to-country contracts has become as the cornerstone for the management team. So that, contractors must focus in:

- Enhance the relationships with each country, by understanding the needs of each.
- Develop cutting edge products and relevant capabilities.
- Control costs, due to the open of the market and the growing competitiveness.

The Transport & Traffic sector is suffering an expansion if we consider the ATM business. Thanks to the SESAR project Indra is leading the civil sky management industry, becoming more and more important. However, it is not the same case for the Transport vertical. Some delays in LatAm and other contracts are lowering the revenues. In any case, Traffic vertical (ATM) offsets the likely losses expected in the following year. The key drivers identified in the T&T Sector are:

- The instability of the oil prices, which is the main asset of the principal countries customers of Indra.

- The gradual augment of the passenger traffic growth which has suffered an upward price change of 78% between 2013 and 2018 in Europe, according to Thomson Reuters.

The IT sector is considered the most challenging and demanding sector from now on. As it was mentioned before in the text, IT industry is being threatened by the startups and the new disrupting technologies, such as, Big Data, Blockchain, Artificial Intelligence, and so on. Soaring competitiveness is cutting margins in the sector, and increasing M&A activities around the world. The verticals more susceptible to be affected by the market situation are Financial Services and Industry & Energy. The market trends are:

- The low-margin nature of the IT business, presenting lacks economies of scale to contest larger international players.
- Further M&A activities in the IT business, increasing the weight of the overall market in comparison with Indra.
- Disrupting technologies applied to both easy standardized solutions and complex multinational products (legislation, etc).

5.2 T&D

This sector, although is very diversified in terms of products, is easily classifiable. The sector is divided in Security and Defense (51% Revenues), ATM System (24% Revenues) and Transport (25% Revenues). Presents the great part of the profit of the company. In the S&D vertical Indra has worked for the European Space Agency, Eurofighter Typhoon and several for the Ministry of Defense of different countries such as, Spain, United Kingdom, Indonesia, Oman, Germany, among others. Security and surveillance system market is growing as a result of the increasing problems with terrorism and immigration.

Revenues in Defense and Security have grown by 2% if comparing the 9M revenues between 2016 and 2017. This sector is expected to grow in a steady basis thanks to the evolution in the Space, Airborne Surveillance System and Eurofighter, especially in Europe and Spain, and Radars in AMEA's regions. We expect a constant growth in this market due to the 3,28% YoY Growth of Spanish GDP and to the new investment program of both the Spanish and German Defense Ministry. Also, it is important to state the leading position of Indra in the Eurofighter Simulators. Bearing in mind the current growth and the started contracts, along with the common European investment policy in S&D, a steady growth in these verticals is expected.

In the T&T vertical Indra presents a strong position in the market. Especially thanks to the iTEC program, providing ATM system solutions around Europe. The ATM business

is one of the most profitable of the company, which has a competitive advantage position. The Transport market has not been successful throughout the last years. Indra, however is gaining more customers due to the good results in several contracts and to the new high-quality solutions that Indra is implementing. Contracts such as, the High Speed Train La Meca – Medina has pushed the international presence of the company. Furthermore, the main contracts in this vertical are: Access control of Shanghai and Bombay Metro and Ticketing in Riad, traffic control in Argelia. And clients: Aena, Adif or Kenya Airports Authority (Nairobi airport). Indra, also presents a strong position in the international ticketing business.

Transport & Traffic sector has decreased -10% its 9M revenues in local currency between 2016 and 2017. The main problem of this reduction comes from the Transport sector which has experienced an inefficient management strategy. Whereas, the Air Traffic Management market (c.50% vertical's revenues) is growing with the expected rates. This situation, however, didn't avoid the decrease in Order Intakes by -13%. The forecast was calculated based on the stability of the Transport market taking in consideration the growth suffered in this sector, especially in Europe. Also, due to the expected growth in the ATM market, which is being suffering an expansion thanks to the SESAR Alliance and the passenger traffic growth. An interesting annual growth is expected, as a result of the development of the business. Also, the ATM vertical is going to gain some importance in the following years, driving the annual growth of the T&T vertical. Thus, the part of the revenues coming from the Air Traffic Management business will be higher than 50% by 2022.

5.3 IT

The IT sector, although it represents the 61% of the total revenues in 2017 is not as profitable as the T&D. The Spanish IT market is well-dominated by Indra, being the biggest corporation and the reference in its country. However, the European market is getting more and more competitive, lowering margins and obligating companies to deliver better and innovative solutions. As a result, M&A transactions are more important than ever, and Indra took its part by acquiring Tecnomcom, among others. IT sector depends on the I+D investments, having serious problems during crisis periods.

The Public Administration and Healthcare represents a profitable business for the company. Notably in the elections control business, in which Indra has been present in countries as for example Spain, Colombia or Irak. The Tecnomcom and Media vertical has as clients Telefonica, Orange or Telecom Italia.

The strongest vertical in the IT sector are Energy and Industry, which equals the 15% of the total revenues in 2016, and Financial Services with a 18% revenues. The Energy

and Industry market is dependent on the stability of the oil prices, as most of the contracts come from countries such as Brazil or Mexico. We can highlight some clients as Red Eléctrica de España, Inditex, Enel and Petrobras. There are also, important contracts as the Partnership Agreement with the Mozambique Ministry of Science and Technology and the management and commercialization of electricity in Ghana. This IT vertical is well located across Africa.

The Financial Services vertical encompass different contracts as the back-office solutions for CaixaBank or the technological partnership with Caixa Economica Federal (Brazil).

The IT sector has suffered a 18% 9M Revenues YoY Growth between 2016 and 2017. The acquisition of Tecnomcom had a positive impact in each sector of IT. Energy & Industry experimented a growth by +16% local currency. The Order Intake grew +26% in local currency. The Financial Services vertical went up by 24% in the 9M 2017 Revenues versus 9M 2016 revenues. While the Order Intake grew by 27% in local currency.

The Telecom and Media sector has experienced a growth of 6% in local currency between 9M 2016 and 9M 2017. This grew was also pushed by Tecnomcom, especially in the Telecom sector. The Public Administration and Healthcare sector revenues grew by 19% thanks not only to Tecnomcom but also to the Elections business in Latam and AMEA regions. We have forecasted a stable future after the acquisition of Tecnomcom. It is as well important to state that we estimated a future positive Spanish and Latin American GDP growth. The estimations for the following years expect to see a constant growth of the IT verticals, initiated by a sudden boost after the acquisition of Tecnomcom.

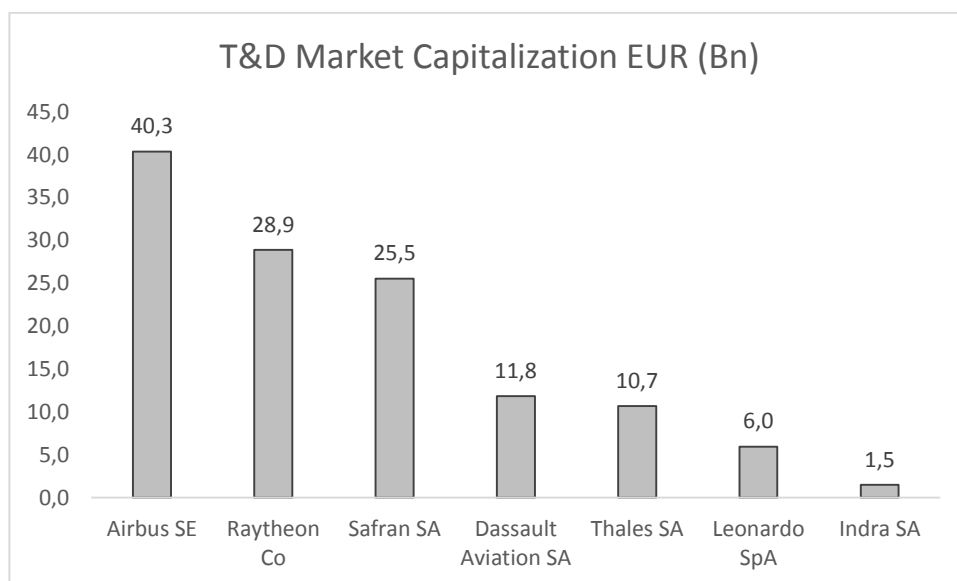
5.4 Competitors

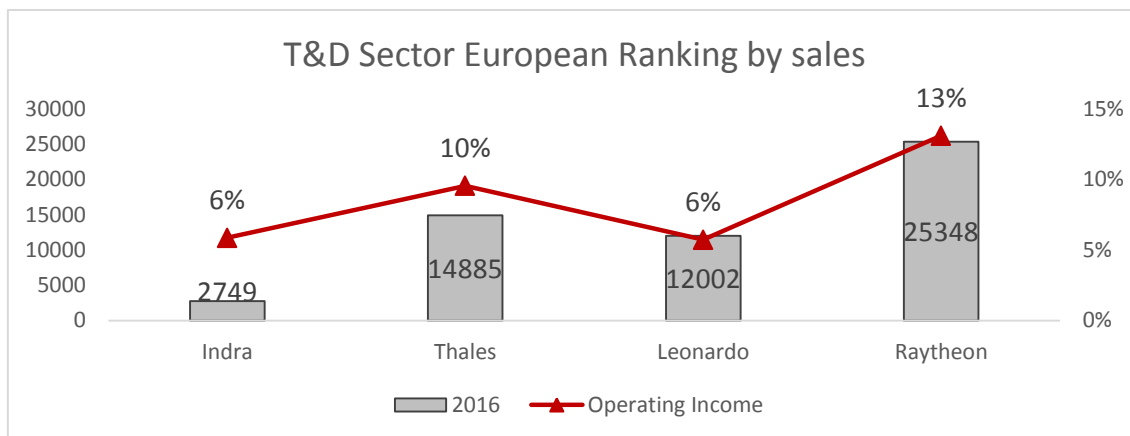
5.4.1 T&D

Transport and security division is characterized by it high margins and high entry barriers. Industry competitors provide different high quality solutions in terms of defense, surveillance, control, etc.. The Security & Defense vertical is becoming more competitive. The aim of defense providers are long term contracts, as defense contractors must change their management to a more local business one. The negotiation county-by-county contracts are the challenge in this time.

The key drivers of the industry are: To enhance the relationships with countries, by understanding their needs. To develop cutting edge products and relevant capabilities. Control costs, due to the open of the market and the growing competitiveness.

Regarding competition, Indra has a fierce European market dominated by global companies such as, Thales, Leonardo or Raytheon. However, there also exist other international peers with higher Market Cap as Airbus. Indra has a competitive advantage position in simulator business, being the most profitable of the company. By comparing the Operating income of the industry, we see that Indra has still a margin to improve, as most its peers benefit from double digit margins. EPS suggest a lower level for Indra, while Leonardo is in negative EPS due to the drop of revenues that they have been suffering since 2013. When comparing by multiples, again, Indra is in the average with its peers, while Leonardo is clearly suffering a recession. In the Transport & Traffic vertical Indra benefits from a competitive advantage position in the ATM market, competing with the French system. The SESAR project is getting more and more allies and growing its revenues.



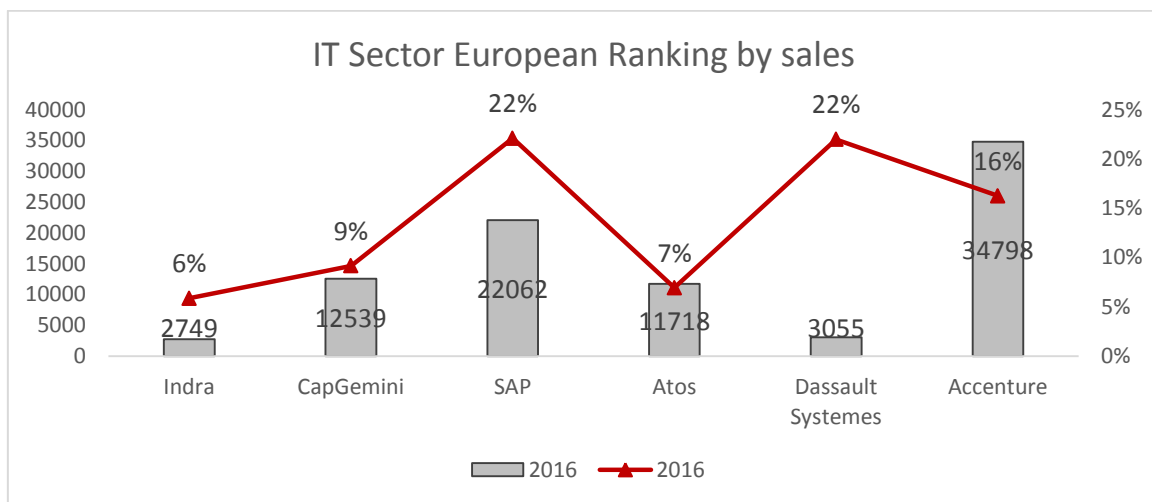
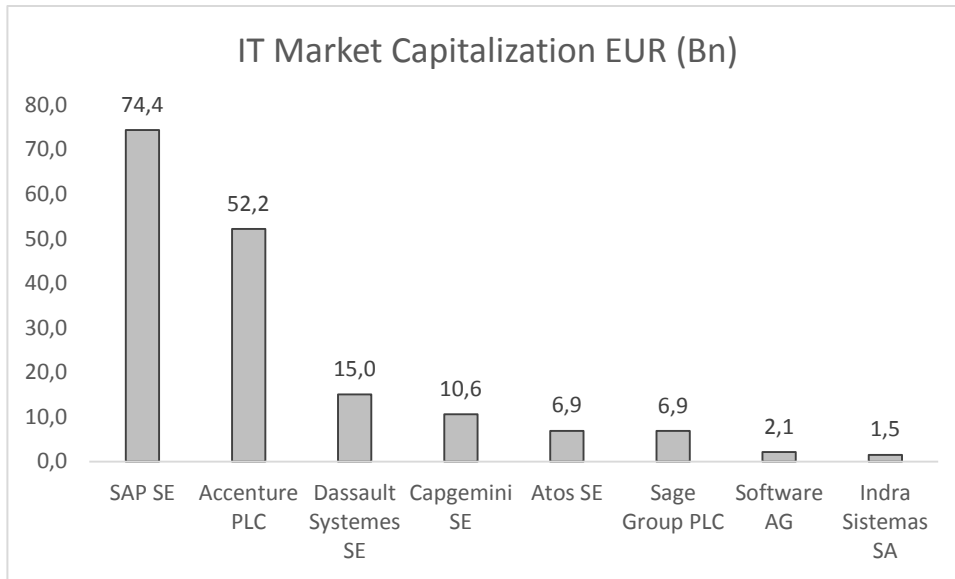


5.4.2 IT

Information Technology is one of the fastest growing industries in the world and it is characterized for its fierce competition and tight margins. Industry players provide a wide variety of services such as software support or data processing facilities management. One of the main drivers of growth in the industry is the increasing need to digitally transform the different sectors of the economy, including companies, public administrations and society as a whole.

Indra divides its IT business in four verticals: Energy & Industry, Financial Services, Telecom & Media and Public Administration & Healthcare. Financial services are a vertical playing a major role. Indra aims to convert its new subsidiary TecnoCom in a global leader in the field of means of payment taking advantage of Indra's presence in Latin America. We are assisting a moment of great innovation in this field thanks to new technology. As a result, the Company expects accelerated growth in this field.

Regarding competition, we find a great number of global players that compete against Indra in the IT sector such as Capgemini, Accenture or Atos among many others. Furthermore, Indra also faces local competition in the different countries where it operates. The main markets for Indra's IT business are located in Spain and Latin America. Indra is strong in the Spanish market; however, it does not happen the same when competing across borders. Indra has one of the lower Market Cap in Europe (1,5 Bn EUR). The Operating margin ended in 6% in 2016, but it is expected to have a rise in 2017 and the subsequent years. We see in the chart the low profitability of the IT business in comparison with its European peers.



5.5 SWOT Analysis

As it has been mentioned above, Indra is a complex company which is considered as two businesses in one. SWOT analysis is used by companies and organizations that need a clear strategy to meet their objectives. This analysis is useful as it helps to eliminate the “noise” of the environment and to focus on what really matters. This is the first step to start a research about a company. The word SWOT stands for Strengths, Weaknesses, Opportunities and Threats. This analysis along with other parts of the Thesis will helped me to better understand the overall situation and competitive position that Indra has in the market.

The SWOT analysis has been divided in the two businesses of Indra. First, starting with the T&D business and then the IT.

5.5.1 T&D

Strengths:

- Indra possess a high weighted product portfolio with high value solutions.
- Most of the products of this sector (D&S, ATM, Transport) experience a rapid development, providing Indra a long-life business cycle.
- Indra is a strong and well-known international brand, specially in D&S business. This is due to the high-quality value propositions provided to important customers. Thus, Indra is positioned as a reference in the global sector.
- S&D is a very profitable business given high margin to the company.
- Stable S&D business thanks to long-term contracts in important projects such as Eurofighter Typhoon 2000.
- It is a healthy business as contributes to the good management of the working capital. Advanced payments.
- High entry barriers due to the importance of brand name and experience.

Weaknesses:

- Weaknesses come from the Transport business. Due to the growth strategy followed after the crisis Indra has accepted risky projects in unknown markets.
- Risky projects in terms of control and political stability

Opportunities:

- It is a sector with that is likely to provide further revenues thanks to all the projects that are being done at this moment. (pipeline)
- New contracts and projects coming from the Spanish Government investments in defense and security.

- Other international defense programs (eg. Germany)
- ATM business is in expansion due to the increasing number of partners in the iTEC system under the Single European Sky program. Also, it is a high profitable business for the company.

Threats:

- It is a sector motivated by the Public Investment, which is in some countries afraid to another recession.
- Indra presents an important Transport pipeline in oil dependent countries. Thus, the current volatility of oil prices are considered as a threat.

5.5.2 IT

Strengths:

- Indra is with no doubt the leader and reference in the IT Spanish market.
- The product portfolio is well diversifies in four different verticals: Financial Services, Public Administration & Healthcare, Energy & Industry and Telecom & Media.
- The ticketing and electoral businesses are well-known in the international market, and provide high margins.

Weaknesses:

- The IT business is a low-margin in general.
- High competitively and low entry barriers, which deepens the margin problems.
- Indra has not a strong international brand out of Spain and LatAm.
- The market is leading to a more focused business in services.
- Projects difficult to manage and in general resulting in a bad working capital balance.

Opportunities:

- The world is moving toward a more digital way of life. Huge investments in IT are done nowadays and are likely to increase exponentially. Big Data, IoT, Blockchain are about to change the industry.
- Tecnocom takeover has increased the position of Indra in the Financial Services vertical.
- Mindsait is considered as reference in the IT management industry.
- Leverage the strong brand name to promote international contracts.

Threats:

- Macroeconomic events led to economic instability in LatAm countries, especially in Brazil and oil dependent countries.
- IT sector fast development makes harder to enhance products quality making M&A the main activity. Then, the margin is likely to narrow.
- Ongoing developing industry plenty of possible disruptive competitors.

6. Current Situation

The analysis of the company starts in the year 2014 as it encompasses the last years of the crisis of the company and the recovery after the strategic plan in 2015. In the *Table 2* below it is shown the huge decrease in sales that the company faced during that time. Special verticals such as Telecom and Media and P.A. and Healthcare were the ones with higher reductions, of 48m € and 61m € respectively. Furthermore, the Transport and Defense business remained in a growing tendency but a lower rate. It is clear how the acquisition of TecnoCom boosted revenues in the IT business between 2016 and 2017. Specially in the verticals of Financial Services and P.A. and Healthcare.

	2014	2015	2016	2017
T&D	1.129	1.175	1.224	1.183
<i>Transport & Traffic</i>	620	633	625	587
<i>Defense and Security</i>	509	542	599	596
IT	1.808	1.675	1.485	1.829
<i>Telecom and Media</i>	321	273	212	236
<i>P.A. And Healthcare</i>	529	468	398	506
<i>Financial and Insurance</i>	485	497	476	605
<i>Energy and Industry</i>	473	437	400	481
TOTAL REVENUES	2.938	2.850	2.709	3.031

Table 2 - Revenues evolution by vertical

The Profit & Loss account shows clearly the evolution of the business during the period analyzed. Although sales decreased from 2014 to 2016 in a 7,8% EBITDA results were significantly higher in 2016 comparing to 2014. It was, in part due to the new cost-efficient policy of the company in the IT line of business, reducing the workforce in the international experience. Then, EBITDA reached 8,4% of the revenues in 2016, improving to 8,8% in 2017. Other key aspect that relates the difficulties overcome by Indra is the EBIT figures. In the years 2014 and 2015 Indra experienced losses of 92 million € and 641 million € respectively. It is the result of the massive write-offs that the new management team had to handle by that time. They are reflected in the “Non-recurring Items”. The result is obviously a dramatic decrease of the profits. However, to better understand the evolution of the company it is better to check the EBIT from operations, which is the Recurrent EBIT. There it is clear that Indra had a huge reduction of 78% in 2015, whereas in 2016 it was recuperated up to 258%. All in all, the net profit has increased consecutively in 2016 and 2017 reaching 2,6% of the revenues and 4,2% respectively.

	2014	2015	2016	2017 (Tec.)
Revenues	2938	2850	2709	3011
Other income	93	86	63	58
Materials consumed and other operating expenses	-1353	-1369	-1199	-1316
Personnel expenses	-1406	-1436	-1342	-1486
Other results	-4	-1	-2	-1
EBITDA	268	131	229	266
Depreciations	-64	-85	-68	-71
EBIT recurrent	204	45	162	196
Non-Recurring Items	-246	-687	0	0
EBIT non-recurrent	-42	-641	162	196
Financial results	-54	-56	-39	-32
Share of profits (losses) of associates and other investees	0	-8	2	0
Earnings Before Taxes	-97	-706	124	163
Income tax expenses	7	64	-54	-34
Profit for the period	-90	-642	70	129
Attributable to minority interests	-2	1	0	-2
Net Profit	-92	-641	70	127

	2014	2015	2016	2017 (Tec.)
Revenues YoY growth (%)		-3,0%	-5,0%	11,1%
EBIT recurrent margin (%)	6,9%	1,6%	6,0%	6,5%
EBIT non-recurrent margin (%)	-1,4%	-22,5%	6,0%	6,5%
Net Profit margin (%)	-3,1%	-22,5%	2,6%	4,2%

Table 3 - Simplified P&L

In the balance sheet the cash management strategy is reflected by increases in 2016 that double the figures of 2015. It kept growing in 2017, helping to Indra to reduce the leverage of the company, and coming back to normal NFD / EBITDA ratios of 2,2x in 2016 and 2017. Also, the increase in the Equity part of the balance sheet shows the acquisition of TecnoCom. Finally, new debt structure seems to have started in the year 2017 as current financial debt has passed from 5% of the total financial debt in 2016 to a 21% in 2017. These figures are aligned with the new financial strategy of the company.

	2014	2015	2016	2017 (Tec.)
Non-current assets	1206	1147	1223	1658
Current assets	1981	1575	1435	1509
Cash & Equivalents	294	341	674	699
Total Assets	3481	3063	3332	3867
Equity	954	308	378	649
Non-current financial debt	826	962	1136	1016
Current financial debt	131	79	61	271
Payables	1193	1230	1238	1328
Others	378	484	519	602
Total Liabilities and Equity	3481	3063	3332	3867
Net Financial Debt	663	700	522	588
NFD/EBITDA	2,5	5,4	2,3	2,2

Table 4 - Simplified Balance Sheet

7. Company Valuation

In order to value the company through the Discounted Cash Flow method the steps and recommendations explained before in the theoretical framework were applied. Thus, the calculation of the Weighted Average Cost of Capital was the cornerstone of the valuation, followed by the forecasting of the expected revenues of the company for the following five years, and the calculation of the Terminal Value in 2022. To do so, a deep market trends understanding is suggested.

7.1 Weighted Average Cost of Capital (WACC)

The WACC is calculated based on the market expectations, estimating the key variables explained in the theoretical framework. The WACC depends basically on the relation between the Market Capitalization of the company, the current financial debt that finance the company operations, and the cost of each:

$$WACC = \frac{(E \cdot K_e + D \cdot K_d \cdot (1 - t))}{E + D}$$

First of all, for the estimation of both the E (Market Capitalization) and D (outstanding financial debt) it is necessary to search in different sources. In the case of the Market Capitalization, it was necessary to go through the IBEX 35 sources to find the current share price of the company, and then calculate the Market Capitalization with the number of shares. The result arisen was 1.96 Billion Euros of Market Capitalization on Monday, 16 April of 2018. The share price in that time was 11,12 Euros per share with a number of 176.654.000 shares.

In the case of the financial debt, it was found in the annual reports of the company. Especially, it was selected from the annual report of 2017, adding both the current and non-current financial debt from the Balance Sheet. Afterwards, the debt was netted, as it is being done by the larger technological companies that count with an excess of extra cash, independently of the operating needs. As it is going to be explained later, the company is expected to keep a large part of the cash in its accounts as a buffer in case of inorganic growth needs. Thus, the financial debt structure of Indra is as follows:

	Debt 2017
Long-term financial debt	1016
Short-term financial debt	271
Gross financial debt	1287
Cash & Equivalents	699
Net Financial Debt (NFD)	588

Table 5 - Debt Structure

The resulting Net Financial Debt is calculated with the sum of the long-term and short-term financial debt, giving a result of 1.287m € of Gross Financial Debt. Once netted with the existing Cash in 2017, the company has 588m € of Net Financial Debt (NFD) in 2017. In any case, the figure used in the WACC calculation is the Financial Debt, not netted.

Thus, the estimations give a percentage of 40% of the capital resources coming from the Debt, while a 60% coming from the Market Capitalization in 16 April of 2018.

For the calculation of the Cost of Debt (K_d), although there are several ways to estimate the price at which the company gets financing, it is used the banking spread plus the risk-free rate. The banking spread value was found in the Bloomberg Terminal with a value of 2,93%. The risk-free rate, also found in the Bloomberg Terminal, has a value of 1,25%, according to the Spanish 10-year Bond yield. Thus, the value of the Cost of Debt (K_d) is 4,18%.

$$K_d = spread + R_f$$

Rf (10y Bond)	1,25%
Spread	2,93%
Cost of Debt (K_d)	4,18%

Table 6 - K_d results

The CAPM model was followed in order to calculate the Cost of Equity (K_e) of the company. In this case, the variables estimated to calculate the K_e are the risk-free rate, the market risk premium and the company Beta.

$$K_e = R_f + \beta \cdot (R_m - R_f)$$

Once again, the Bloomberg Terminal helped to find the current values of each variable. The market premium is the difference between the expected return of a portfolio and the risk-free rate. Bearing this in mind, the market risk (R_m) in 16 April of 2018, with a value of 11,16%. The risk-free rate obtained from the 10-year Spanish Bond yield is 1,25%. Then, the market risk premium is 9,92%.

The last step in the K_e estimation is the Beta of the company. The Beta tries to summarize the volatility of the company in comparison with the whole market. In that sense, the value obtained is 0,95, considering the Historical Monthly Beta between 2015 and 2018. It gathers the variances of Indra and the IBEX 35 during the period of time selected.

The result of 0,82 make us understand that Indra is expected to have less fluctuations in stock prices than the IBEX 35. Once we have the historical beta, now is needed to adjust the unleveraged beta to the current capital structure of the company. In this case, Indra presents a 40% of financial debt and a 60% of own resources. Applying the formula below it is obtained the leveraged beta, which is going to be used for the WACC estimation. The leveraged beta results in 1,206.

$$Beta = \beta_u \cdot \left(1 + \frac{(1 - t) \cdot D}{E} \right)$$

Then, the estimated value of the Cost of Equity (K_e) of the company is 13,20%.

$$K_e = R_f + \beta \cdot (R_m - R_f)$$

R_m	11,16%
R_f	1,25%
Premium ($R_m - R_f$)	9,91%
Beta	1,206

Table 7 - K_e results

Finally, the WACC estimation is done introducing the values of the variables within the formula of the WACC. Thus, the value of the WACC is 8,90%;

$$WACC = \frac{(E \cdot K_e + D \cdot K_d \cdot (1 - t))}{E + D}$$

Market Cap. [E]	1964
Financial Debt [D]	1287
K_e	10,67%
K_d	4,18%
Tax Rate	28%

WACC	9,17%
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Table 8 - WACC results

7.2 Forecast

Once the discounting rate is estimated, the next step is to figure out what is going to be the annual growth rate of the company in terms of revenues. Here, specific and deep knowledge about several aspects of the industry and the company must be applied. In the case of Indra, it is particularly difficult to estimate the overall growth of the company. However, the process done in this Thesis is; divide the company

revenues forecast by vertical. By splitting the forecast of each vertical of Indra it was possible to avoid the problems presented by the diversification. Although, significant issues have been found in the IT business. The *Table 9* shows the revenues forecast expected for the company.

Also, as a result of the recent events in Indra (margin crisis and takeover of TecnoCom), predictions were extremely hard to find. Thus, all the interpretations have been done following the figures expected by Indra. Although this way to calculate may lead to subjective approaches, macroeconomic and industry trends have been taken into account. Consequently;

- **Defense & Security:** In the D&S business Indra was expecting a 5% growth CAGR in the revenues between 2014 and 2018. According to the annual report presented in 2017, Indra reached the objective one year before the expected. Thus, the forecasting revenues from now to 2022 are following the expectations that Indra released in November 2017. Furthermore, the uncertainty in the geopolitical landscape (rise of cyber-attacks, tension between Eastern Europe with NATO countries, drug struggling, ISIS activity, etc.) will foster the investments in T&D around the world, starting with the new global investment cycle. Also, the recovery in the Spanish sector with the state launched in December 2017 by the Ministry of Defense to boost military expending by 80% by 2024, and the well-done job in Spain during the last decade will improve the relations with further customers. All in all, and following with the expectations of the company for the following years of mid to high single digit CAGR growth from 2016 to 2020, the forecasted revenues will be as follows:
 - ❖ 5,8% CAGR growth in revenues between 2016 and 2020.
 - ❖ Steady growth during 2018 and 2019 with annual increase by 4% and 5% respectively.
 - ❖ Peek growth of 15% in 2020 due to finished contracts that will report higher punctual sales.
 - ❖ Constant annual growth of 2% from 2020 on.
- **Transport & Traffic:** This business was analyzed as a double vertical business, first the Transport vertical and the ATM or Traffic vertical. In this case, the revenues of the business as a whole (T&T) was expected to experience a CAGR growth between 2014 and 2018 of 3%. However, revenues have decreased by -1,8% CAGR between 2014 and 2017. This shrink has been pushed by the problems in the Transport vertical, which is suffering delays and reduction of international investments. In any case, the ATM vertical, which represents 50%

of the T&T business is still growing. Nonetheless, the expectations say that Indra is going to keep growing in the ATM vertical thanks to the position of advantage of Single European Sky through SESAR and iTEC. Growth in the Traffic vertical will offset the likely further problems in the Transport vertical. Indra still expect a high single digit CAGR growth for the Transport vertical and a mid-single digit for the ATM. The forecast followed in the Thesis shows, however, expectations in the other way around:

- ❖ Constant annual revenues growth in the T&T business of 7% thanks to the offsetting made by the ATM vertical.
 - ❖ Final CAGR growth of 6,7% between 2017 and 2022.
- IT: The IT line of business is suffering huge challenges due to the disrupting technologies that are affecting to the whole IT industry along with financial industry, and so on. The IT LoB is experiencing a sudden boost in their revenues as a result of the takeover of TecnoCom. This, however, is not going to last for a long time, as the current M&A environment will oblige Indra to make decisions in the business in order to not be obsolete. Furthermore, the whole IT business is forecasted as a whole, by cause of the difficulty to forecast each vertical individually and because they all are affected at the same time by the disrupting technologies:
- ❖ Expected annual revenues growth of 7% in IT for 2018.
 - ❖ Significant reduction in the annual growth of 2019 to 3%.
 - ❖ Constant revenues annual growth of 2% from 2020 in advance.

To sum up the forecasting, the revenues of T&D line of business is expected to grow at a 6,13% CAGR growth between 2017 and 2022, passing from representing a 39% of the total revenues in 2017 to a 42,7% in 2022. On the other hand, the IT revenues will increase by 3,19% CAGR between 2017 and 2022, reducing the percentage in the total revenues from 61% in 2017 to 57,3% in 2022. As a result, total revenues of Indra must experience an increase of; 7,8% annual growth in 2018, 4,5% annual growth in 2019 and a constant annual growth of 3% from 2020 in advance, with a final result of 4,5% CAGR growth between these 5 years, which matches with the strategic plan presented in 2014 for 2018 objectives. All the data can be seen in the Appendix. The final revenues percentages will be:

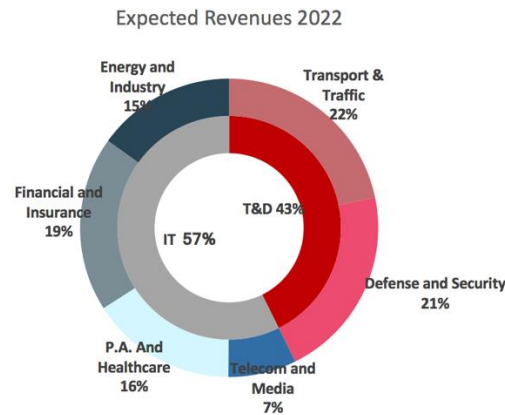


Figure 3 - Expected revenues by vertical 2022

All the information is gathered in the following tables;

	2017	2018E	2019E	2020E	2021E	2022E
T&D	1183	1241	1316	1460	1525	1593
<i>Transport & Traffic</i>	587	619	663	709	759	812
<i>Defense and Security</i>	596	622	653	751	766	781
IT	1829	1957	2016	2056	2097	2139
<i>Telecom and Media</i>	236	253	260	265	271	276
<i>P.A. And Healthcare</i>	506	542	558	569	581	592
<i>Financial and Insurance</i>	605	648	667	681	694	708
<i>Energy and Industry</i>	481	515	530	541	552	563
TOTAL REVENUES	3031	3267	3414	3516	3622	3732

	2017	2018E	2019E	2020E	2021E	2022E
<i>Transport & Traffic</i>	-6,1%	5,5%	7,0%	7,0%	7,0%	7,0%
<i>Defense and Security</i>	-0,5%	4,3%	5,0%	15,0%	2,0%	2,0%
T&D	-3,4%	4,9%	6,0%	11,0%	4,4%	4,5%
IT	23,1%	7,0%	3,0%	2,0%	2,0%	2,0%
TOTAL REVENUES	11,9%	7,8%	4,5%	3,0%	3,0%	3,0%

Table 9 - Revenues by vertical forecast

7.3 Assumptions

For the calculation of the Free Cash Flow of Indra some assumptions were considered, following the information released by the company in the last strategic plan:

- Capex spending will increase from 1,3% of the total revenues in 2017 to 1,5% of the total revenues in the years 2018, 2019 and 2020. Then, an upward increase to 1,9% of the total revenues will be spent in 2021 and 2022. These figures represent the expansionary policy of the company, reaching the expected in 2022.

- EBIT margin is a cornerstone in the expectations promised by Indra to the investors. In the present Thesis, it is expected a better off in the EBIT margin as a result, among other things, to the acquisition of TecnoCom and the resulting synergies in terms of cost efficiency. Also, the swift to a more T&D weighted revenue makes Indra reducing costs as T&D operations are more profitable than IT. Less workforce needed to deploy demanded services. EBIT margin is assumed to grow by 1% every year from 6,5% in 2017 to 10,5% of the total revenues in 2020.
- Working Capital more efficient management is assumed, increasing from the 2,2% of the revenues in 2017 to a 4% in 2018, and to a 7% from 2019 in advance. In addition, these figures match with the more WC efficiency management promises of the company.
- Non-recurring expenses are considered “zero” in the following years. After the massive number of write-offs handled by Indra during 2014 and 2015, no more are awaited.
- Tax rate is set at 28% of the Earnings Before Taxes (EBT).
- Dividends payment will be again started in the year 2020, according to the promises made by Indra. In this case, the payments are considered to be gradually, starting at 0,34€ per share in 2020 and followed by 0,68€ per share from 2021 in advance.

The result of the assumptions mentioned can be seen in the simplified table of the P&L. All the figures are expected to grow, having a final net profit of 225m € in 2022, which matches with the expectations of Indra. This figure, however, appears with a delay of a few years, due to the weakness showed at the beginning of the year 2018. Also, it is important to see how there is not non-recurrent expenses in the next five years.

	2017	2018E	2019E	2020E	2021E	2022E
Revenues	3011	3267	3414	3516	3622	3732
Operating expenses	-1316	-1384	-1434	-1461	-1488	-1533
Personnel expenses	-1486	-1563	-1620	-1650	-1681	-1731
Other results	-1	-1	-1	-1	-1	-1
EBITDA	266	319	358	404	452	467
Depreciations	-71	-65	-68	-70	-72	-75
EBIT	196	254	290	333	379	392
Financial results	-32	-65	-68	-70	-72	-75
Earnings Before Taxes	163	188	221	262	307	317
Income tax expenses	-34	-53	-62	-73	-86	-89
Profit for the period	129	135	159	189	221	228
Attributable to minority interests	-2	-2	-2	-3	-3	-3
Net Profit	127	133	157	186	218	225

Table 10 - P&L assumptions results

Margins are shown in the *Table 11*, where the EBIT margin evolves according to the assumptions described. Also, it is interesting see how the net profit margin increases 43% between 2017 and 2022.

	2017	2018E	2019E	2020E	2021E	2022E
Revenues YoY growth (%)	11,1%	8,5%	4,5%	3,0%	3,0%	3,0%
EBIT margin (%)	6,5%	7,8%	8,5%	9,5%	10,5%	10,5%
Net Profit margin (%)	4,2%	4,1%	4,6%	5,3%	6,0%	6,0%

Table 11 - P&L assumptions margins

Then, the balance sheet shows how the company is going to increase its Cash % Equivalents in the following 5 years, up to double the current figure. This is the result of a more cash management focus strategy, as it is assumed that Indra is going to need cash as a margin or buffer to face further M&A activities in the IT industry. Consequently, the NFD/EBITDA ratio will be reduced to 0.6x.

	2017	2018E	2019E	2020E	2021E	2022E
Non-current assets	1658	1741	1725	1782	1842	1903
Current assets	1509	1617	1685	1732	1780	1831
Cash & Equivalents	699	832	989	1115	1213	1318
Total Assets	3867	4190	4399	4629	4835	5053
Equity	649	783	941	1068	1166	1272
Non-current financial debt	1016	1095	1145	1179	1214	1251
Current financial debt	271	292	305	314	324	334
Payables	1328	1371	1330	1370	1411	1454
Others	602	649	678	698	719	741
Total Liabilities and Equity	3867	4190	4399	4629	4835	5053
Net Financial Debt	588	555	461	378	325	267
NFD/EBITDA	2,2	1,7	1,3	0,9	0,7	0,6

Table 12 - Balance Sheet assumptions results

7.4 Terminal Value

The Terminal Value would be the last variable needed to calculate in order to apply the DCF model. It basically depends on the last free cash flow estimated. In the case of this Thesis, the last free cash flow corresponds to the year 2022 with a value of 278m €. Then, it is adjusted to perpetuity applying the growth rate, estimated in 1,5% due to the expected constant growth in the demand in the different businesses of Indra until 2030. Thus, the Terminal Value gives a result of 3814m €;

$$TV = \frac{CF_{2022} \cdot (1 + g)}{WACC - g}$$

Growth (g)	1,50%
CF 2022	278,2
WACC	9,17%
Terminal Value	3679

Table 13 - Terminal Value results

7.5 Valuation Results

Once every variable is defined and estimated, it is only necessary to apply the DCF formula in order to calculate the value of the company. Now, the discount rate is the WACC, before calculated, and the cash flows are the free cash flows of each year.

$$Present Value = \frac{CF_1}{1+k} + \frac{CF_2}{(1+k)^2} + \frac{CF_3}{(1+k)^3} + \dots + \frac{CF_n + TV}{(1+k)^n}$$

The value of the company is 3341m €. Now the last step is to subtract the value of the financial debt in the year 2017, which is 1287m €. It gives a final result of 2054m €. This final market value of the company is divided by the number of shares to obtain the share price of Indra, that divided by 176.654.000 shares gives a result of 11,63€/share.

NPV	3341
Financial Debt	1287
Valuation	2054
Nº Shares	176.654.000
Share price	11,63 €

Table 14 - Share price value

7.6 Sensitivity Analysis

To better understand the result of the valuation, it is done a sensitivity analysis that shows the possible variations in the share price of Indra, depending on the growth rate to perpetuity (g) and the WACC. As it is shown in the *Table 15*, the share price ranges between 14,51€ and 9,43€ for a given growth rate. It is obvious that a minimum change in the WACC estimations can lead to a completely different result. In any case, the price reached under the assumptions before stated is 11,63€ per share.

		Growth (g)				
		1,10%	1,30%	1,50%	1,70%	1,90%
WACC	8,17%	13,54 €	14,01 €	14,51 €	15,04 €	15,61 €
	8,67%	12,14 €	12,54 €	12,97 €	13,42 €	13,90 €
	9,17%	10,92 €	11,27 €	11,63 €	12,02 €	12,43 €
	9,67%	9,84 €	10,14 €	10,46 €	10,80 €	11,15 €
	10,17%	8,88 €	9,15 €	9,43 €	9,72 €	10,02 €

Table 15 - Sensitivity analysis

8. Conclusions

The analysis and valuation show how Indra has overcome the deep crisis it was involved by 2015. However, it is not that clear that they are going to meet the objectives announced in the last strategic plan.

Indra managed to improve its numbers in 2017 thanks to the acquisition of TecnoCom. The consolidation of the IT market in Spain helps Indra to remain competitive facing the new disrupting technologies. Here is where I can understand the basic emotional biases that drive the decision making of the manager team. They probably saw the acquisition as an opportunity to avoid obsolescence in the IT business, leading to a strong bounded rationality. Thus, expected fintech boost in the payment solutions disturbed the rationality of the managers, making them to be overconfident in the transaction. The sentiment risk was low, enabling them to offer a premium of 12% over the price at that time.

TecnoCom acquisition is a move that consolidates the Spanish IT market, but the threats are global. Was the management team ignoring some information as a consequence of the confirmation bias? It is hard to know. What we really know is that Indra trusted in the investment, expecting synergies of 40 million euros. The only think that Indra was afraid is the expected time to fully profit from that synergies.

In my opinion, Indra did the right move. According to the results, the company price remains near the average of the last months, in 11,63€ per share. The net debt is going to be decreased thanks to the management of cash policy. Thus, the company is going to enjoy of more dynamism in case of likely M&A transactions in the IT industry. On the other hand, the T&D business remains healthy with expected annual growths in the revenues of the whole division, especially in the ATM vertical. Finally, the EBIT margin has started to rise in 2017, and I expect it to reach 10,5% by 2021, a little bit later than expected by the company.

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10. Appendix

Profit & Loss Account

	2014	2015	2016	2017 (Tec.)	2018E	2019E	2020E	2021E	2022E
Revenues	2938	2850	2709	3011	3267	3414	3516	3622	3732
Other income	93	86	63	58	0	0	0	0	0
Materials consumed and other operating expenses	-1353	-1369	-1199	-1316	-1384	-1434	-1461	-1488	-1533
Personnel expenses	-1406	-1436	-1342	-1486	-1563	-1620	-1650	-1681	-1731
Other results	-4,1	-1,1	-1,5	-1,1	-1,1	-1,2	-1,2	-1,2	-1,3
Gross Operating Profit (recurrent EBITDA)	268	131	229	266	319	358	404	452	467
Depreciations	-64	-85	-68	-71	-65	-68	-70	-72	-75
% Depreciation to Sales	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Non-Recurring Items (non-expected expenses or one-time)	-246	-687	0	0	0	0	0	0	0
Net Operating Profit (EBIT)	-42	-641	162	196	254	290	333	379	392
<i>EBIT Margin</i>	-1%	-23%	6%	6%	8%	9%	10%	11%	11%
Financial results	-54	-56	-39	-32	-65	-68	-70	-72	-75
% Fin. Result to Sales	-2%	-2%	-1%	-1%	-2%	-2%	-2%	-2%	-2%
Share of profits (losses) of associates and other investees	-0,2	-8,3	1,7	-0,5	-0,5	-0,5	-0,5	-0,5	-0,5
Earnings Before Taxes	-97	-706	124	163	188	221	262	307	317
<i>Tax Rate</i>			43%	21%	28%	28%	28%	28%	28%
Income tax expenses	7	64	-54	-34	-53	-62	-73	-86	-89
Profit for the period	-90	-642	70	129	135	159	189	221	228
Attributable to minority interests	-1,5	0,7	-0,4	-2,2	-2,4	-2,5	-2,5	-2,6	-2,7
Net Profit	-92	-641	70	127	133	157	186	218	225

Balance Sheet

	2014	2015	2016	2017	2018E	2019E	2020E	2021E	2022E
Property, Plant and Equipment	127	137	103	106	89	72	55	51	47
Goodwill	583	470	472	803	843	808	858	894	932
Intangible asstes	290	289	285	352	380	397	409	421	434
Long-term financial assets	90	50	185	232	250	261	269	277	286
Deferred tax assets	116	200	178	166	179	187	192	198	204
Total non-current assets	1206	1147	1223	1658	1741	1725	1782	1842	1903
Inventories	231	70	69	89	96	101	104	107	110
Receivables	1666	1429	1250	1304	1405	1468	1512	1558	1605
Other	85	76	115	116	116	116	116	116	116
Cash	294	341	674	699	832	989	1115	1213	1318
Total current assets	2275	1916	2109	2208	2449	2674	2847	2994	3150
Total Assets	3481	3063	3332	3867	4190	4399	4629	4835	5053
Share Capital and Reserves	943	297	368	641	774	931	1057	1155	1260
Treasury stock	-2	-3	-3	-9	-9	-9	-9	-9	-9
Equity attributable to parent company	941	294	365	631	765	921	1047	1145	1251
Minority interests	13	14	13	18	19	20	20	21	22
Total Equity	954	308	378	649	783	941	1068	1166	1272
Provisions for liabilities and charges	40	103	99	70	76	79	81	84	86
Long term borrowings	826	962	1136	1016	1095	1145	1179	1214	1251
Other financial liabilities	9	12	9	0	0	0	0	0	0
Deferred tax liabilities	2	3	12	21	22	23	24	25	26
Other non-current liabilities	35	27	89	136	147	154	158	163	168
Non-current liabilities	912	1107	1346	1244	1340	1401	1443	1486	1532
Current borrowings	131	79	61	271	292	305	314	324	334
Payables	1193	1230	1238	1328	1371	1330	1370	1411	1454
Other current liabilities	292	339	309	375	404	422	435	448	461
Current liabilities	1616	1648	1608	1974	2066	2057	2119	2182	2249
Total Liabilities	3481	3063	3332	3867	4190	4399	4629	4835	5053
Current borrowings	131	79	61	271	292	305	314	324	334
Long term borrowings	826	962	1136	1016	1095	1145	1179	1214	1251
Gross financial debt	957	1041	1197	1287	1387	1450	1493	1538	1585
Cash and cash equivalents	294	341	674	699	832	989	1115	1213	1318
Net Debt	663	700	522	588	555	461	378	325	267
Net Debt/EBITDA	2,5x	5,4x	2,3x	2,2x	1,7x	1,3x	0,9x	0,7x	0,6x

Cash Flow

	2017 (Tec.)	2018E	2019E	2020E	2021E	2022E
EBIT		254	290	333	379	392
Tax on EBIT (28%)		-71	-81	-93	-106	-110
Depreciation		65	68	70	72	75
CAPEX		-49	-51	-53	-69	-71
WC needs		-66	-108	-7	-7	-8
FCF		134	117	250	269	278
Terminal Value						3680
FCF	186	134	117	250	269	3958
FCF y(0)	186	122	98	192	190	2552
NPV	3341					
Value	2054					
Shares	176654000					
Share Price	11,63 €					