



2018

CREATING VALUE IN THE TECHNOLOGY SECTOR

AVA Research on the main European listed companies



**ACTIVE
VALUE
ADVISORS.**
Management Consultants

Introduction

This research investigates the **European Technology sector** based on a sample of 50 leading European listed companies.

These companies are further classified into the following market sub-sectors: **Computer Hardware, Computer Services, Consumer Electronics, Electronic Equipment, Internet, Semiconductors, Software, Spec.Consumer Service, Telecom. Equipment.**

Their performance is analyzed using four different approaches. The first is **The Traditional Approach** which examines common indicators such as Sales, EBIT and Profit. The other three approaches: **The EVA® View, The EVA® People-Based View and The Market View** are designed to measure companies' ability to create Value. The **EVA® People-Based View** investigates the issues of productivity and employees' value creation. **The Market View**, on the other hand, focuses on understanding market expectations regarding future company performance in terms of created Value. Thus, it serves as a basic tool to revise business plans and improve incentive schemes to achieve the set objectives.

Finally, Active Value Advisors provides its point of view about some recent "**Hot Topics**" companies need to deal with when they face challenges related to **profitability, efficiency and organizational flexibility** or when they need to take full advantage of **technology (i.e. Big Data, Cloud Computing, Business Intelligence)** in the most profitable way.

Active Value Advisors believes that properly managing and constantly monitoring information through **Business Intelligence & Analytics tools** can contribute significantly to an exceptional performance. Another extremely important driver in this historical context is related to the **organizational dimension** which represents the "real challenge" companies have to face in order to deal effectively with the complexity of the current competitive environment.

How to measure company performance?

TRADITIONAL APPROACH

Analysis of traditional performance indicators and KPIs

Investigating companies' performance we couldn't omit the **analysis of margins and profitability**. Therefore, we initially examined traditional performance indicators such as Sales, EBIT and Net profit.

EVA® VIEW

Analysis of Value creation

Sometimes, though, the adoption of a traditional approach might make us short-sighted and unable to detect possible problems related to the performed strategy or to come up with solutions. A methodology based on the actual Value created by a company addresses these issues.

A company generates **Value** when its Return on Invested Capital (**ROIC**) is higher than what investors expect to get by taking on an equally risky investment (**WACC**).

Value creation is assessed using the EVA® formula:

$$\text{EVA}^{\circledR} = (\text{ROIC} - \text{WACC}) * \text{Invested Capital}^1$$

EVA® PEOPLE BASED

Human Resources productivity

One of the main features of the EVA® methodology is that it provides some alternative ways of reading the management performance achieved by the company and allows to associate the created **Value** with the determinants that have contributed to generate it.

Indeed, by applying a simple algebraic decomposition to the traditional EVA® formulation we can obtain the EVA® People Based formula, an Economic Profit computed considering **“People” instead of “Capital”**:

$$\text{EVA}^{\circledR} \text{ People Based} = (\text{Labour Productivity} - \text{Average Labour Cost}) * \text{N}^{\circ} \text{Employees}$$

MARKET VIEW

Sustaining performance over time

Creating wealth and value through performance improvements is one of the core aspects of “doing business”. Nevertheless, ensuring business Sustainability over time is certainly not less important.

Analyzing current performance is a very good starting point, but it is equally important to understand market expectations about **future performance**:

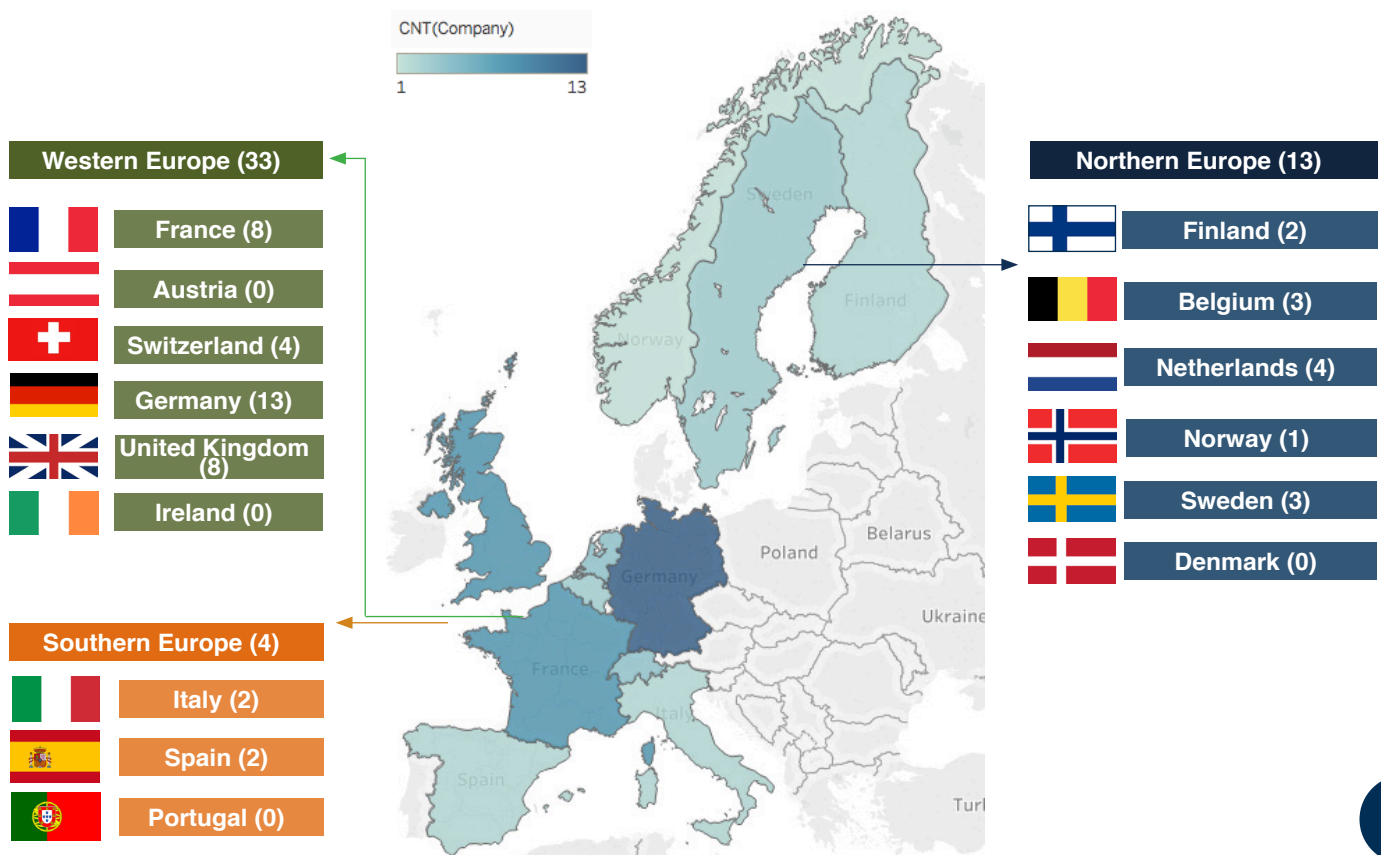
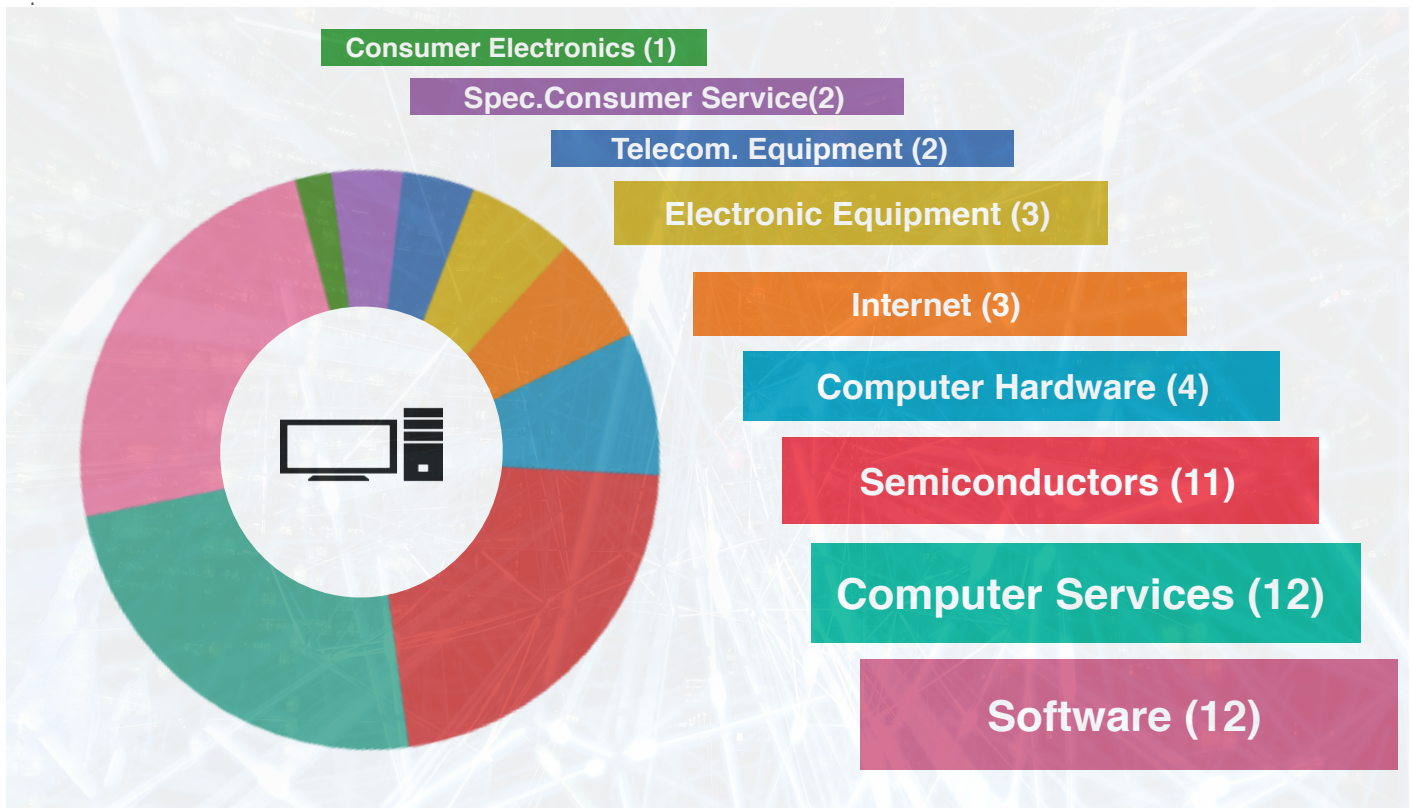
- *Is a positive EVA® performance likely to repeat in the future?*
- *Does the market believe in a possible turnaround for negative EVA® performances?*

¹ AVA advises to use Invested Capital net of goodwill for management purposes and applies this best practice to the EVA® View and EVA® People-Based analyses. The Market View analysis and price decomposition instead is carried out using Invested Capital without netting out goodwill.

The research sample

This study investigates the performance of the **Technology sector** in 2017 by analyzing a basket of **European listed companies**.

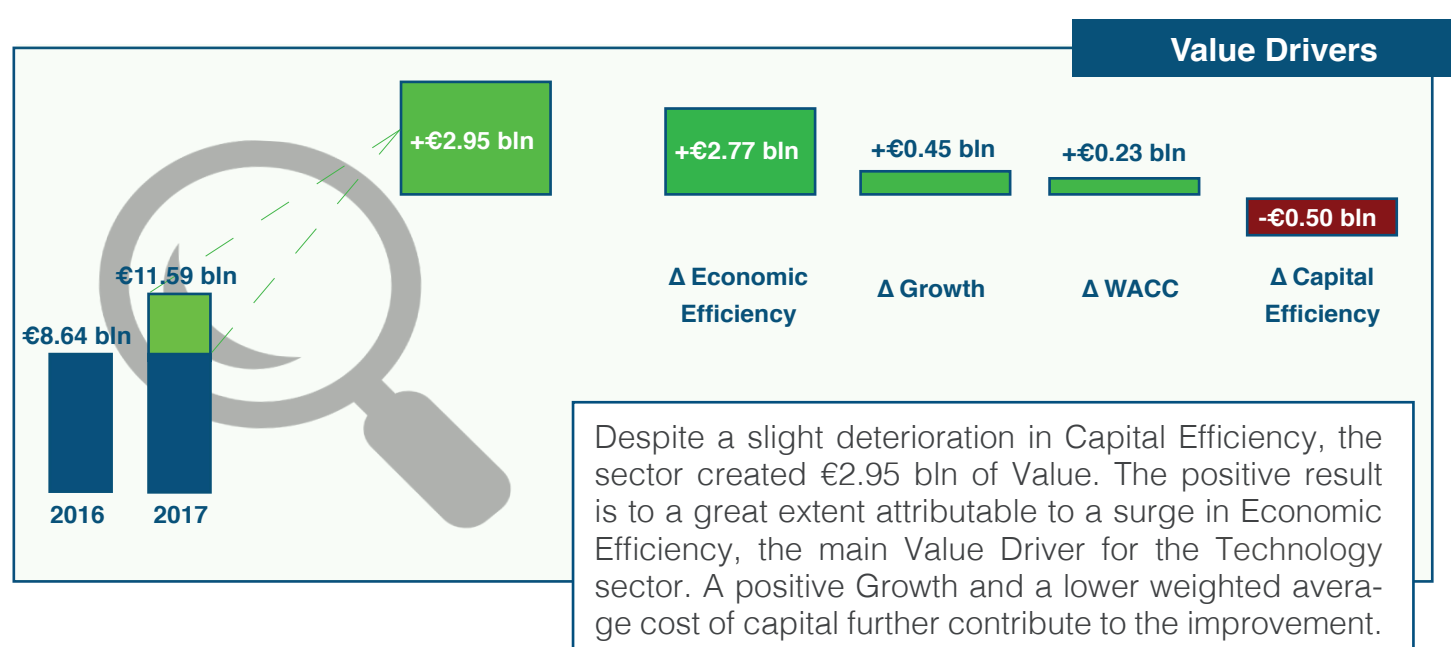
The sample is composed of **50** leading companies listed on the main European exchanges. The companies have been further categorized into the following subsectors:



The Technology sector in a nutshell

Sales for the Technology companies in the sample grew by 8.2% w.r. to 2016 and reached €165,7 bln in 2017. The sector's **profitability** suffered a slight decline instead with profit margins (Profit/Sales) dropping to 6.9% (-0.3 p.p. w.r. to 2016). The subsector with the highest, 14.5%, margin is **Semiconductors**, followed by the **Internet** subsector with an average 13.9% margin. The companies in the Consumer Electronics, Spec.Consumer Service and Telecom subsectors recorded negative profit margins instead.

As far as **Value creation** is concerned, the sector managed to deliver an **exceptional +34.2% improvement** relative to 2016, with EVA® hitting €11.6 bln in 2017. In this context, the **Software** and **Semiconductors** subsectors stand out with an average €481.0 mln and €319.3 EVA®/company respectively.



Average **employee productivity**, at €84.5k in 2017, is **on the rise** relative to 2016 (+6.7%). Interestingly, this growth was not matched by an equivalent increase in average salaries (+2.6% w.r. to 2016). In the same period, the number of employees of the Technology increased by 4.5%. In the context of employee productivity, the **Software** subsector's performance is distinctive with an average €147.2k/employee. **Spec.Consumer Service** companies place second with an average €94.6k/employee productivity.

What do the markets tell us about the Technology sector? The picture here is **optimistic**. The sector FGV, positive also in 2016, grows further in 2017. What does it mean? A positive sector FGV implies that the expected return implicit in stock prices is now higher than the actual return obtained. In other words, investors are positive about future performance improvements in the Technology sector. This is true for all subsectors except Electronic Equipment.

The Traditional Approach

TRADITIONAL APPROACH

The table below shows the **Top 10** companies based on the **The Traditional Approach**.

In the three columns we have reported respectively:

- the **differential (%) between 2017 and 2016 Sales**
- the **2017 EBIT/Sales**
- the **2017 Profit/Sales**.

| | |
|---|-------------------|
|  | ASM INTERNATIONAL |
|  | ASML HOLDING |
|  | SCOUT24 |
|  | MELEXIS |
|  | AMADEUS IT GROUP |
|  | AVEVA GROUP |
|  | THE SAGE GROUP |
|  | HEXAGON |
|  | RIB SOFTWARE |
|  | SAP |

| Δ Sales (2017-2016) | EBIT/Sales | Profit/Sales |
|---------------------|------------|--------------|
| 23% | 16% | 61% |
| 33% | 27% | 23% |
| 9% | 36% | 23% |
| 12% | 25% | 22% |
| 8% | 28% | 21% |
| 3% | 22% | 18% |
| 5% | 26% | 17% |
| 10% | 27% | 17% |
| 11% | 17% | 17% |
| 6% | 24% | 16% |

The Dutch company, **ASM INTERNATIONAL**, has the highest Profit/Sales margin.



*See the complete table at page 15

Value Creation - The EVA® View



The following table shows the **Top 10** companies based on the **EVA® View**.

In the five columns we have reported respectively:

- the **2017 EVA®/Sales**
- the sign of **EVA®**
- the sign of the **EVA® variation between 2017 and the 2016-2015 mean**
- the sign of the **Sales variation between 2017 and the 2016-2015 mean**
- the **Status, or the label used by AVA to assess companies' performance.**

| | EVA®/Sales | EVA® (+/-) | ΔEVA® (+/-) | ΔSales (+/-) | Status |
|------------------|------------|------------|-------------|--------------|----------|
| THE SAGE GROUP | 21% | + | + | + | Champion |
| HEXAGON | 19% | + | + | + | Champion |
| MELEXIS | 18% | + | + | + | Champion |
| SAP | 17% | + | + | + | Champion |
| ASML HOLDING | 17% | + | + | + | Champion |
| SCOUT24 | 16% | + | + | + | Champion |
| SILTRONIC | 16% | + | + | + | Champion |
| AVEVA GROUP | 15% | + | + | - | Focusing |
| XING SE | 12% | + | + | + | Champion |
| AMADEUS IT GROUP | 12% | + | + | + | Champion |

Champion

Companies with an outstanding and improving performance in terms of both sales growth and adopting an EVA® view.

Focusing

Companies featuring slower growth but higher and more focused Value Creation.

WHAT IS EVA® ?



EVA® is a residual Income, i.e. the residual value of Sales after deducting the cost of all operating factors, including the opportunity cost of the capital invested by shareholders.

*See the complete table at page 16











Value Creation- The People-Based Approach

EVA® PEOPLE BASED

The following table represents the **Top 10** companies in the sample, for what concerns the **EVA® People Based**.

In the three columns we have reported respectively:

- the **2017 Number of Employees**
- the **2017 Productivity** per employee
- the **2017 EVA®** per employee.

| | N° Employees | Productivity/ Employee (€ '000) | EVA®/Employee (€ '000) |
|--|--------------|---------------------------------------|---------------------------|
|  ASML HOLDING | 19,216 | 173 | 81 |
|  MELEXIS | 1,276 | 132 | 71 |
|  SCOUT24 | 1,244 | 163 | 65 |
|  DIALOG SEMICONDUCTOR | 2,071 | 172 | 55 |
|  SILTRONIC | 3,730 | 134 | 51 |
|  AMADEUS IT GROUP | 14,963 | 139 | 49 |
|  SAP | 88,543 | 178 | 47 |
|  HEXAGON | 18,315 | 100 | 37 |
|  JUST EAT | 2,116 | 95 | 34 |
|  THE SAGE GROUP | 13,795 | 94 | 29 |

*See the complete table at page 17

The Market: sustaining performance



Share prices are usually defined “**forward looking**” in that they embed valuable information about a company’s performance expectations. Through daily quotations, the capital market quantifies the expectations of multiple investors about the company’s future performance.

By decomposing a company’s value it is possible to **learn about market expectations** and, most of all, to quantify the company’s performance improvements needed to meet (or exceed) these expectations.

Market Value Added (MVA)

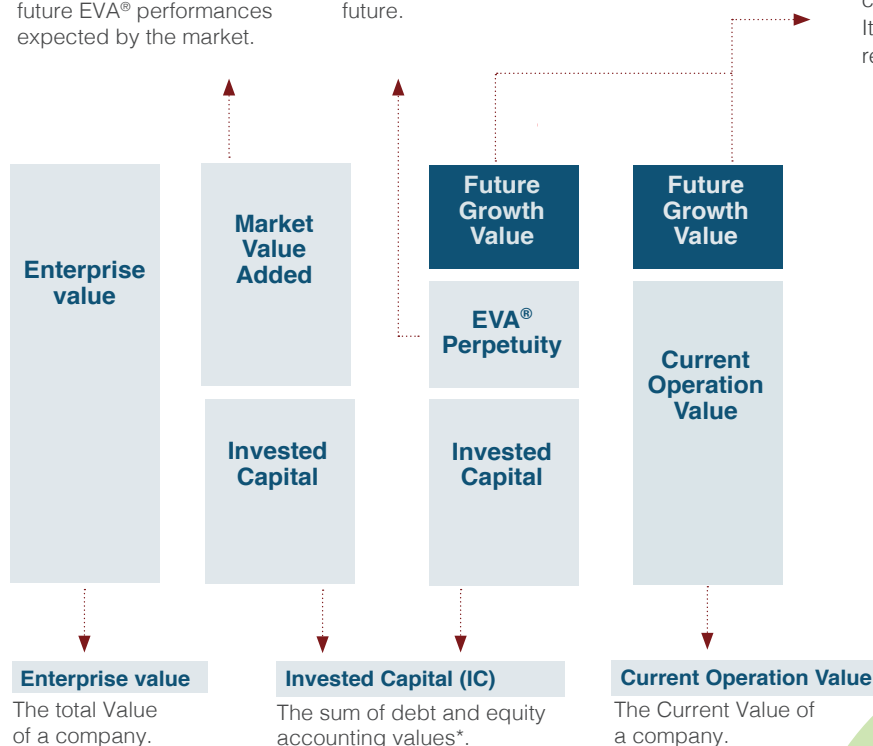
A measure of the Value created by a company. It can be seen as the sum of all the future EVA® performances expected by the market.

EVA® Perpetuity

The portion of MVA explained by the company’s ability to replicate the achieved results (2017) in the future.

Future Growth Value

The difference between MVA and EVA® Perpetuity. It quantifies market expectations about a company’s future over (or under) performance. It is the present value of the future Δ EVA®s with respect to the last EVA® recorded (EVA® 2017).



ROIC

ROIC (actual) is the Return generated by the Capital Invested (IC) in the company. It is calculated using accounting values.

ROIC° (ROIC expected)

ROIC° (expected), implicit in market prices, represents the “theoretical” Return required by investors to meet market expectations.

WHAT DOES THIS METHODOLOGY MEAN FOR COMPANIES?

The understanding of the expected performance improvements implied in a company’s share price gives companies the opportunity to revise and adjust their business plans. Moreover, it provides the board with information to assist decision-making in areas such as **target setting** and **management incentive schemes**.

A Company with a high FGV needs to deliver positive Δ EVA®s to avoid the stock price taking on a downward trend. Similarly, a high FGV company will find it difficult to increase its share price- it would need to outperform its expected EVA® performance. Such a company will have a ROIC° higher than its actual ROIC.











A company with a negative FGV will instead need relatively small improvements to beat market expectations and achieve a higher share price. Such a company will have a ROIC° that is lower than its actual ROIC.

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The Market: Prices and Expectations

Accordingly, a company's share price can be decomposed into two elements: the **Current Value Component** and the **Future Value Component**.

The table below shows data on: **Share Prices**, **Price components**, **ROIC** and **ROIC^e** for the top 10 companies by market capitalization and for the Italian companies in the sample (share prices as of December, 29th 2017).

| | Price/share (€) | = | Current Value Component (€) | + | Future Value Component (€) | ROIC | ROIC ^e |
|---|-----------------|---|-----------------------------|---|----------------------------|------|-------------------|
|  SAP | 93.54 | = | 68.57 | + | 24.97 | 71% | 96% |
|  ASML HOLDING | 145.15 | = | 92.72 | + | 52.43 | 20% | 32% |
|  AMADEUS IT GROUP | 60.11 | = | 26.04 | + | 34.07 | 26% | 56% |
|  INFINEON TECHNOLOGIES | 22.90 | = | 14.58 | + | 8.31 | 19% | 32% |
|  DASSAULT SYSTEMES | 88.59 | = | 38.84 | + | 49.75 | 21% | 56% |
|  NOKIA | 3.89 | = | 1.76 | + | 2.13 | 6% | 26% |
|  CAPGEMINI | 98.89 | = | 94.24 | + | 4.65 | 90% | 94% |
|  STMICROELECTRONICS | 18.21 | = | 15.11 | + | 3.10 | 19% | 23% |
|  HEXAGON | 41.80 | = | 15.11 | + | 4.70 | 36% | 39% |
|  ATOS | 121.35 | = | 136.32 | + | -14.97 | NA | NA |

FOCUS ON ITALY

| | | | | | | | |
|---|-------|---|-------|---|-------|-----|-----|
|  DATALOGIC | 30.82 | = | 12.42 | + | 18.40 | 37% | 91% |
|  REPLY | 46.17 | = | 19.11 | + | 27.06 | 17% | 43% |

*See the complete table at page 18

Our “Hot Topics”

Revenue Management

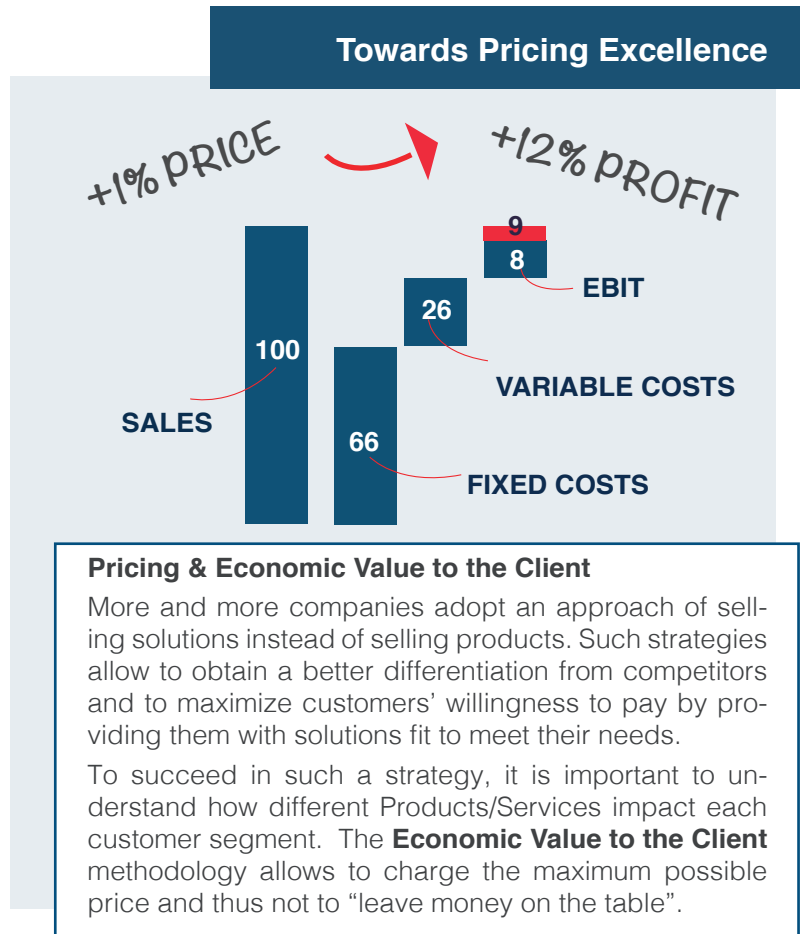
A wide range of opportunities to increase Value

The primary aim of Revenue Management is selling the right product to the right customer at the right time for the right price and with the right configuration. The essence of this discipline is understanding customers’ perceptions about Product Value and accurately aligning Product Prices, Placement and Availability for each Customer segment. Revenue Management absorbs a wide range of opportunities to increase Value. Pricing is the most important Revenue Management lever.

Why not to use a data-driven strategy to meet these challenges and increase Revenues?

Active Value Advisors approaches the issue of Revenue Management by integrating specialized competences and the use of state-of-the-art Business Intelligence tools.

With Self BI tools like Tableau Software or Qlik, we can provide different solutions and models that are tailored to customer needs and quickly available. Win/Loss models, Price waterfall, Price elasticity, Price corridors, Variance analysis and many others are powerful tools to address operational and decisional mechanisms. The main aim of a Pricing strategy is understanding and “anticipating” the **Value created** for clients and setting prices that allow to capture this Value.



Pricing & Economic Value to the Client

More and more companies adopt an approach of selling solutions instead of selling products. Such strategies allow to obtain a better differentiation from competitors and to maximize customers’ willingness to pay by providing them with solutions fit to meet their needs.

To succeed in such a strategy, it is important to understand how different Products/Services impact each customer segment. The **Economic Value to the Client** methodology allows to charge the maximum possible price and thus not to “leave money on the table”.

Many of our Revenue management projects start with a diagnostic activity, quick but well-structured, based on our proprietary methodology. It allows companies to understand which operational mechanisms to change and which tools to adopt to close the gaps with respect to best practice and/or to the desired results.



Our “Hot Topics”

Network Analysis and the measure of Cooperation

Why do many excellent strategies fail or do not deliver the expected results? While there are numerous potential factors that may help explain it, there is one that is common to (almost) all cases: people. The problem is not their lack of competences or knowledge. Rather, problems arise due to corporate behaviour and the difficulty with which it can be changed and aligned with a company’s strategies.

Cooperation to reduce complexity. “Business complexity” grew sixfold in the last sixty years.

Traditional solutions are obsolete to deliver the successful organizational change required by today’s fast-changing business world. Understanding and continuously and efficiently managing corporate behaviour is therefore a must.

What does it mean? That to succeed in a complex and continuously changing business environment, it is necessary to work not only on the “Organizational Skeleton”, but also (and most importantly) on its “Nervous System”, i.e. how people interact and work with each other.

The **SOLUTION:** Embrace new tools to quickly understand how organizations really work (Organizational Network Analysis - ONA), to foster engagement, to promote management’s behavioural change (e.g. **continuous feedback**) and to adopt **incentive schemes** designed to induce people to look for **cooperation**.

How to be sure that the **informal organizational structure** is aligned with the **formal/desired one**?



Diagnostic Analysis

A web-based analysis which delivers a snapshot of the organization through diagnostic indicators and different organizational views.

- ✓ Scope and organizational focus definition
- ✓ Web-based survey (4 questions) administration
- ✓ Results analysis
- ✓ Research evidence presentation and detailed report



Internal Network Map

Extends some features of the platform to groups of resources in order to support internal processes, facilitate interaction and continuously monitor the organization.

- ✓ Scope and organizational focus definition
- ✓ Open web-based survey for selected groups
- ✓ Profiles and internal expertise collection
- ✓ Launch & Training

How to measure the level of Cooperation ?

HOW-4 is a simple but extremely powerful Organizational Network Analysis tool. It allows to analyze organizational networks and informal relationships in complex and large organizations.

HOW-4 can be used to map how an organization really works at different levels: company, business unit/team, individual. Specific indicators and different visualizations facilitate the reading of the evidence provided by such an analysis.

HOW-Targets is an optional tool that allows to understand how internal resources create groups, to discover each individual’s role within such a group and to assess his/her effort and contribution relative to a company’s strategic objectives.



ORGANIZATIONAL NETWORK ANALYSIS
activevalue.eu

Our “Hot Topics”

Target Setting Outside-In

What is it about?

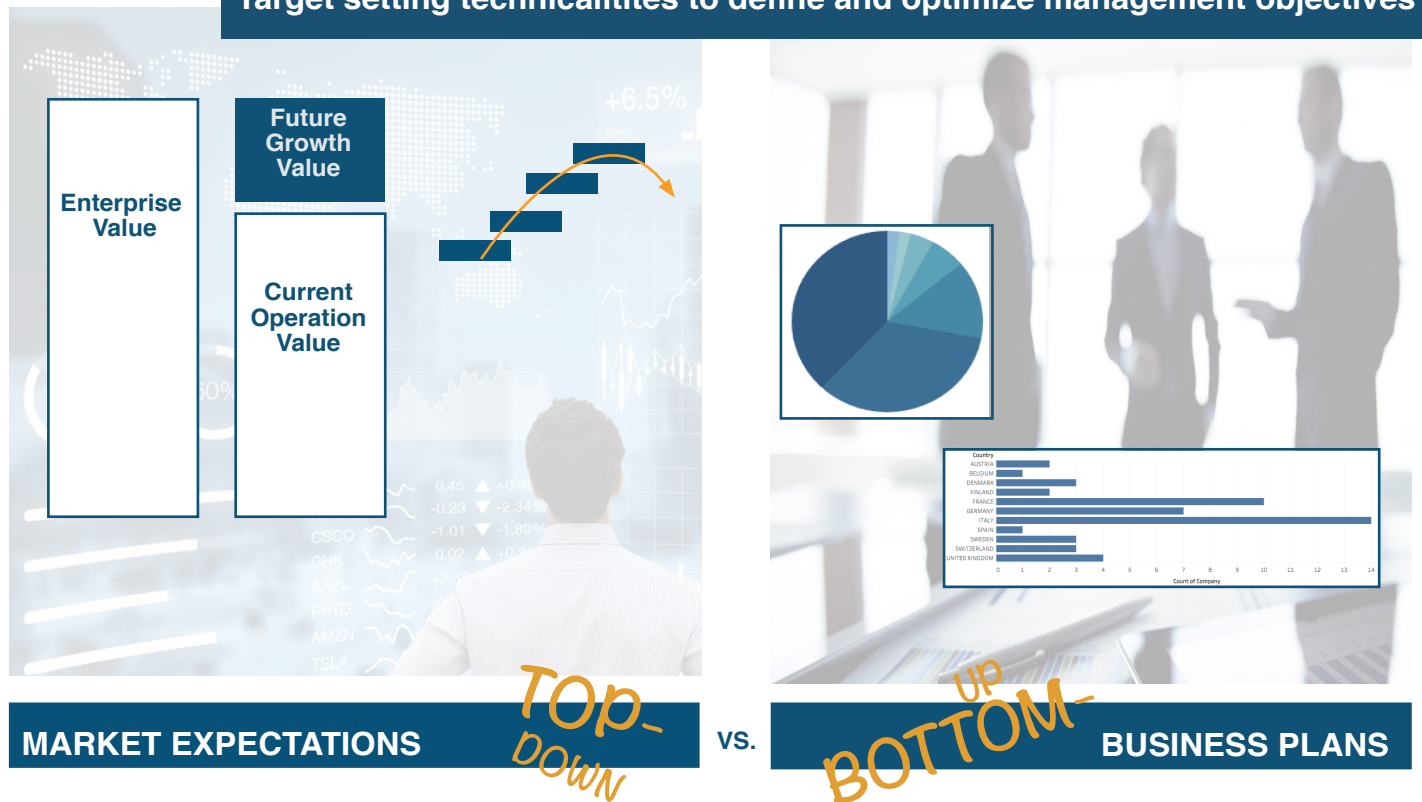
Through Target Setting modeling and simulation, it is possible to tie the expectations implicit in stock market prices to the operating results that represent the fundamental Values of a Company.

“Target setting Outside-In” represents the “reverse engineering approach” of a traditional equity valuation process. Starting from stock prices and using solid models the fundamentals that are incorporated within these prices are determined. This powerful approach, fully complementary to the traditional planning process, allows to enormously enrich it by taking advantage of all the information included in stock prices.

What is the objective of Target Setting Outside-In?

- To assess the level of challenge of Business Plans given the ‘true’ Value of a company
- To benchmark market expectations using a group of peer companies
- To define and optimize the relevant managerial levers, with due importance given to external factors
- To enable the implementation of innovative Governance Systems by defining long-term management objectives and coherent incentive schemes BEFORE business plans are drafted.

Target setting technicalities to define and optimize management objectives



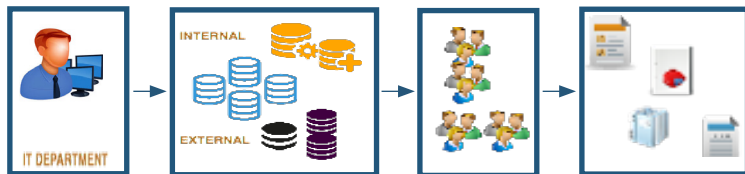
Our “Hot Topics”

Business Intelligence & Analytics

Data grow and change rapidly. If collected, analyzed and visualized properly they can be a source of valuable information, insights and competitive advantage. This data availability boom delineates a new role for IT teams.

In such a context, the term “Business Intelligence” is a concept that expresses the need to think beyond the paradigm of data analysis in isolation from business goals. Indeed, through **Self Business Intelligence**, technology and business objectives should blend together into a new configuration, within a solid decision-making framework. Today new technologies, such as Big Data, Analytics, Mobile and Cloud computing are able to capture massive and detailed streams of data, in a relatively **easy and convenient way**.

Data Management “NOW”

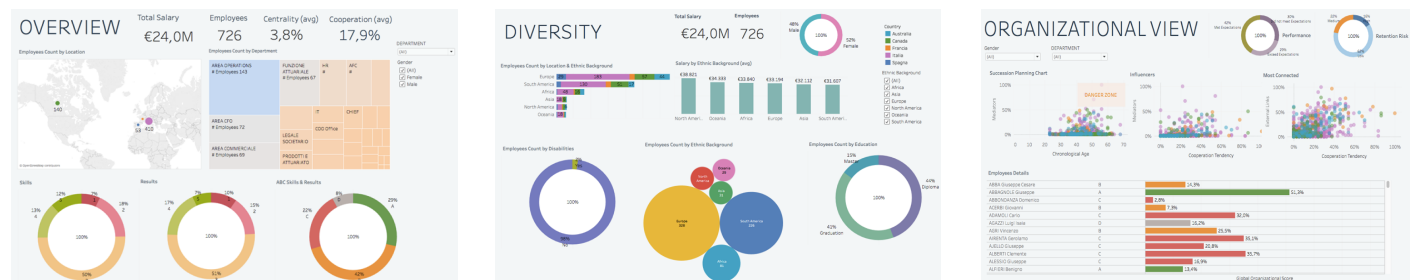


A “dynamic” model in which a Business continuously transforms data and “discovers” information that is useful at a particular point in time, making it easily understandable through data visualization and in which the IT Department acts as “the guardian” of the proper management of data sources.

- ✔ Multitude of data available
- ✔ Data always up-to-date
- ✔ Ease of data analysis
- ✔ Data centralization and uniqueness
- ✔ Reports created by final users
- ✔ Customizable output

But having everything is not always better than having nothing. **The value of data is contingent on being able to extract information.** And, this is not just a matter of tools. The role of Management is **to know what data to look for to address relevant business issues and to maximize the use of data to support strategic decisions.**

Numerous Graphs and Visualizations to address different needs

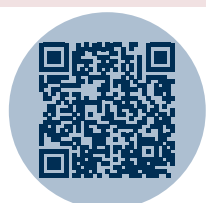


Scatter plot
Spot Outliers

Line graph
Identify trends

Map
Show geographic distribution

Tree Map
Visualize proportions



CUSTOMER VALUE
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Active Value Advisors

3 Competence Centres

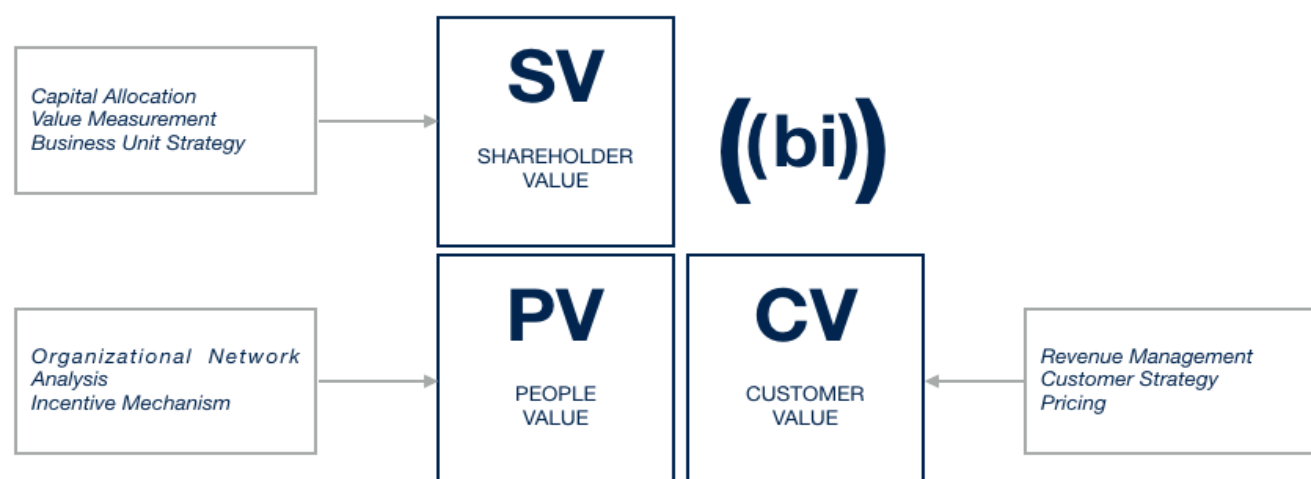
Active Value Advisors is an independent management consulting firm that acts as a partner for Companies that need to strengthen their Governance System and for Companies that want to pursue a path of growth by applying solutions consistent with the objective of creating sustainable Value.

Active Value Advisors assists such companies by leveraging successful techniques and experiences focused on Value-based management systems and by making them available to the top management through **Business Intelligence (BI) tools**.

The professionals of Active Value Advisors have a long experience in assisting major Italian listed groups in the development of Business Plans, in selecting the actions to improve Value performance and in assisting the change process required by the competitive dynamics and market opportunities.

In carrying out these mandates a common Value framework is applied to various management issues: **Shareholder Value, Customer Value and People Value**. Each competence centre responds to a fundamental dimension of the management system and addresses key stakeholders: Shareholders, Customers and Internal Resources.

Thanks to the collaboration with accredited professionals in the area of Strategic Pricing, Active Value Advisors has enriched its skills and professional methods with innovative models and tools of Value Pricing.



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The Traditional Approach - complete table

| Company | Δ Sales (%) | EBIT/Sales | Profit/Sales |
|-------------------------------|-------------|------------|--------------|
| ALSO HOLDING AG | 13% | 1% | 1% |
| ALTEN | 13% | 10% | 7% |
| AMADEUS IT GROUP SA | 8% | 28% | 21% |
| AMS AG | 93% | 5% | 8% |
| ASM INTERNATIONAL NV | 23% | 16% | 61% |
| ASML HOLDING NV | 33% | 27% | 23% |
| ATOS SE | 8% | 8% | 5% |
| AVEVA GROUP PLC | 3% | 22% | 18% |
| AXIS AB | 15% | 12% | 9% |
| BARCO NV | -2% | 7% | 2% |
| BECHTLE AG | 15% | 4% | 3% |
| CANCOM SE | 14% | 5% | 3% |
| CAPGEMINI SE | 2% | 10% | 6% |
| COMPUGROUP MEDICAL SE | 4% | 14% | 5% |
| COMPUTACENTER PLC | 13% | 3% | 2% |
| DASSAULT SYSTEMES SE | 6% | 24% | 16% |
| DATALOGIC SPA | 5% | 13% | 10% |
| DELIVERY HERO AG | 83% | -49% | -63% |
| DIALOG SEMICONDUCTOR PLC | 9% | 15% | 13% |
| DIEBOLD NIXDORF AG | -12% | 8% | 9% |
| DORMAKABA HOLDING AG | 18% | 13% | 5% |
| ECONOCOM GROUP SE | 17% | 4% | 3% |
| EVRY ASA | 2% | 12% | -2% |
| FIDESSA GROUP PLC | 3% | 4% | 10% |
| GEMALTO N.V. | -6% | 2% | -14% |
| HEXAGON AB | 10% | 27% | 17% |
| HUBER UND SUHNER AG | 4% | 7% | 5% |
| INDRA SISTEMAS | 10% | 6% | 4% |
| INFINEON TECHNOLOGIES AG | 9% | 14% | 11% |
| INGENICO GROUP SA | 9% | 16% | 10% |
| IQE PLC | 12% | 11% | 14% |
| ISRA VISION AG | 11% | 19% | 14% |
| JUST EAT PLC | 40% | 22% | -19% |
| LOGITECH INTERNATIONAL SA | 10% | 9% | 9% |
| MELEXIS NV | 12% | 25% | 22% |
| MICRO FOCUS INTERNATIONAL PLC | 24% | 28% | 11% |
| NOKIA OY | -2% | 5% | -6% |
| REPLY SPA | 13% | 11% | 9% |
| RIB SOFTWARE SE | 11% | 17% | 17% |
| SAP SE | 6% | 24% | 16% |
| SCOUT24 AG | 9% | 36% | 23% |
| SILTRONIC AG | 26% | 20% | 16% |
| SOITEC | 5% | 12% | 3% |
| SOPHOS GROUP PLC | 23% | -2% | -9% |
| STMICROELECTRONICS NV | 16% | 13% | 3% |
| THE SAGE GROUP PLC | 5% | 26% | 17% |
| TIETO OYJ | 3% | 9% | 7% |
| TOMTOM N.V. | -9% | 10% | -23% |
| X FAB SILICON FOUNDRIES EV | 10% | 6% | 15% |
| XING SE | 27% | 23% | 14% |

Value Creation - complete table

| Company | EVA®/ Sales | EVA® +/- | Δ EVA® +/- | Δ Sales +/- | Status |
|-------------------------------|-------------|----------|------------|-------------|--------------------|
| ALSO HOLDING AG | 1% | + | + | + | Champion |
| ALTEN | 5% | + | + | + | Champion |
| AMADEUS IT GROUP SA | 15% | + | + | + | Champion |
| AMS AG | 1% | + | - | + | Need for control |
| ASM INTERNATIONAL NV | 7% | + | + | + | Champion |
| ASML HOLDING NV | 17% | + | + | + | Champion |
| ATOS SE | 7% | + | + | + | Champion |
| AVEVA GROUP PLC | 16% | + | + | - | Focusing |
| AXIS AB | 8% | + | + | + | Champion |
| BARCO NV | 4% | + | + | + | Champion |
| BECHTLE AG | 2% | + | + | + | Champion |
| CANCOM SE | 3% | + | + | + | Champion |
| CAPGEMINI SE | 7% | + | - | + | Need for control |
| COMPUGROUP MEDICAL SE | 6% | + | + | + | Champion |
| COMPUTACENTER PLC | 2% | + | + | + | Champion |
| DASSAULT SYSTEMES SE | 12% | + | + | + | Champion |
| DATALOGIC SPA | 8% | + | + | + | Champion |
| DELIVERY HERO AG | -53% | - | NA | + | NA |
| DIALOG SEMICONDUCTOR PLC | 10% | + | - | + | Need for control |
| DIEBOLD NIXDORF AG | 6% | + | + | - | Focusing |
| DORMAKABA HOLDING AG | 8% | + | + | + | Champion |
| ECONOCOM GROUP SE | 3% | + | + | + | Champion |
| EVRY ASA | 9% | + | NA | - | NA |
| FIDESSA GROUP PLC | -1% | - | + | - | Restructuring |
| GEMALTO N.V. | 0% | - | - | - | Need for rebirth |
| HEXAGON AB | 19% | + | + | + | Champion |
| HUBER UND SUHNER AG | 2% | + | - | + | Need for control |
| INDRA SISTEMAS | 2% | + | + | + | Champion |
| INFINEON TECHNOLOGIES AG | 9% | + | + | + | Champion |
| INGENICO GROUP SA | 5% | + | - | + | Need for control |
| IQE PLC | 4% | + | - | + | Need for control |
| ISRA VISION AG | 9% | + | + | + | Champion |
| JUST EAT PLC | 12% | + | + | + | Champion |
| LOGITECH INTERNATIONAL SA | 8% | + | + | + | Champion |
| MELEXIS NV | 18% | + | + | + | Champion |
| MICRO FOCUS INTERNATIONAL PLC | 12% | + | + | + | Champion |
| NOKIA OY | 0% | + | - | + | Need for control |
| REPLY SPA | 3% | + | + | + | Champion |
| RIB SOFTWARE SE | 4% | + | + | + | Champion |
| SAP SE | 18% | + | + | + | Champion |
| SCOUT24 AG | 17% | + | + | + | Champion |
| SILTRONIC AG | 16% | + | + | + | Champion |
| SOITEC | 8% | + | + | + | Champion |
| SOPHOS GROUP PLC | -2% | - | - | + | What after growth? |
| STMICROELECTRONICS NV | 8% | + | + | + | Champion |
| THE SAGE GROUP PLC | 21% | + | + | + | Champion |
| TIETO OYJ | 5% | + | + | + | Champion |
| TOMTOM N.V. | 9% | + | + | - | Focusing |
| X FAB SILICON FOUNDRIES EV | 1% | + | NA | + | NA |
| XING SE | 16% | + | + | + | Champion |



Need for control

Companies featured by a temporary downturn.



Champion

Companies with an outstanding and improving performance in terms of both sales growth and adopting an EVA® view.



Falling Angel

Companies, once Champions, but now facing decreasing performances both in terms of EVA® and Sales. It may thus be necessary to revise the Value Proposition.



Need for rebirth

Companies with worsening results, affected by heavy difficulties and witnessing a complete Value destruction.



What after growth?

Companies focused solely on growth. It may be necessary to verify/revise business objectives.



Focusing

Companies featuring slower growth but higher and more focused Value Creation.

The People-Based Approach- complete table

| Company | N° Employees | Productivity/ Employee (€'000) | EVA [®] / Employee (€'000) |
|-------------------------------|--------------|-----------------------------------|--|
| ALSO HOLDING AG | 3,870 | 74 | 17 |
| ALTEN | 28,000 | 53 | 3 |
| AMADEUS IT GROUP SA | 14,963 | 139 | 49 |
| AMS AG | 11,168 | NA | 1 |
| ASM INTERNATIONAL NV | 1,900 | 116 | 27 |
| ASML HOLDING NV | 19,216 | 173 | 81 |
| ATOS SE | 89,989 | 73 | 10 |
| AVEVA GROUP PLC | 1,692 | 94 | 23 |
| AXIS AB | 2,865 | NA | 25 |
| BARCO NV | 3,515 | NA | 14 |
| BECHTLE AG | 8,353 | 69 | 8 |
| CANCOM SE | 2,913 | 78 | 12 |
| CAPGEMINI SE | 199,698 | 45 | 5 |
| COMPUGROUP MEDICAL SE | 4,572 | 67 | 8 |
| COMPUTACENTER PLC | 14,026 | NA | 5 |
| DASSAULT SYSTEMES SE | 16,140 | 118 | 23 |
| DATALOGIC SPA | 2,912 | 60 | 17 |
| DELIVERY HERO AG | 14,631 | -8 | -20 |
| DIALOG SEMICONDUCTOR PLC | 2,071 | 172 | 55 |
| DIEBOLD NIXDORF AG | 8,401 | 87 | 17 |
| DORMAKABA HOLDING AG | 16,965 | NA | 11 |
| ECONOCOM GROUP SE | 10,760 | 60 | 8 |
| EVRY ASA | 8,545 | 86 | 14 |
| FIDESSA GROUP PLC | 1,705 | 117 | -3 |
| GEMALTO N.V. | 15,000 | 76 | -1 |
| HEXAGON AB | 18,315 | 100 | 37 |
| HUBER UND SUHNER AG | 4,200 | 59 | 3 |
| INDRA SISTEMAS | 40,020 | 39 | 1 |
| INFINEON TECHNOLOGIES AG | 37,479 | 75 | 16 |
| INGENICO GROUP SA | 8,003 | NA | 16 |
| IQE PLC | 591 | 97 | 10 |
| ISRA VISION AG | 692 | 88 | 20 |
| JUST EAT PLC | 2,116 | 95 | 34 |
| LOGITECH INTERNATIONAL SA | 6,400 | NA | 25 |
| MELEXIS NV | 1,276 | 132 | 71 |
| MICRO FOCUS INTERNATIONAL PLC | 4,826 | 136 | 29 |
| NOKIA OY | 103,000 | 76 | 0 |
| REPLY SPA | 6,456 | 71 | 4 |
| RIB SOFTWARE SE | 832 | 66 | 5 |
| SAP SE | 88,543 | 178 | 47 |
| SCOUT24 AG | 1,244 | 163 | 65 |
| SILTRONIC AG | 3,730 | 134 | 51 |
| SOITEC | 942 | NA | 22 |
| SOPHOS GROUP PLC | 3,122 | NA | -3 |
| STMICROELECTRONICS NV | 45,468 | 65 | 12 |
| THE SAGE GROUP PLC | 13,795 | 94 | 29 |
| TIETO OYJ | 14,329 | 66 | 5 |
| TOMTOM N.V. | 4,825 | NA | 18 |
| X FAB SILICON FOUNDRIES EV | 3,965 | NA | 1 |
| XING SE | 1,290 | 77 | 22 |

The Market - complete table (prices as of 29.12.2017)

| Company | Price/share (€) | | Current Value Component (€) | | Future Value Component (€) | ROIC | ROIC° |
|-------------------------------|-----------------|---|-----------------------------|---|----------------------------|------|-------|
| ALSO HOLDING AG | 114.52 | = | 148.69 | + | -34.17 | 15% | 12% |
| ALTEN | 69.61 | = | 67.68 | + | 1.93 | 17% | 18% |
| AMADEUS IT GROUP SA | 60.11 | = | 26.04 | + | 34.07 | 26% | 56% |
| AMS AG | 75.59 | = | 4.41 | + | 71.18 | 6% | 36% |
| ASM INTERNATIONAL NV | 56.37 | = | 47.84 | + | 8.53 | 10% | 16% |
| ASML HOLDING NV | 145.15 | = | 92.72 | + | 52.43 | 20% | 32% |
| ATOS SE | 121.35 | = | 136.32 | + | -14.97 | NA | NA |
| AVEVA GROUP PLC | 20.19 | = | 8.56 | + | 11.63 | 44% | 126% |
| AXIS AB | 34.57 | = | 22.41 | + | 12.16 | 68% | 118% |
| BARCO NV | 89.25 | = | 90.83 | + | -1.58 | 29% | 34% |
| BECHTLE AG | 69.90 | = | 49.87 | + | 20.03 | 15% | 21% |
| CANCOM SE | 68.78 | = | 52.36 | + | 16.42 | 49% | 76% |
| CAPGEMINI SE | 98.89 | = | 94.24 | + | 4.65 | 90% | 94% |
| COMPUGROUP MEDICAL SE | 55.14 | = | 12.16 | + | 42.98 | 17% | 56% |
| COMPUTACENTER PLC | 12.99 | = | 12.62 | + | 0.37 | 34% | 41% |
| DASSAULT SYSTEMES SE | 88.59 | = | 38.84 | + | 49.75 | 21% | 56% |
| DATALOGIC SPA | 30.82 | = | 12.42 | + | 18.40 | 37% | 91% |
| DELIVERY HERO AG | 32.96 | = | -24.93 | + | 57.88 | -74% | 87% |
| DIALOG SEMICONDUCTOR PLC | 25.96 | = | 43.53 | + | -17.57 | 21% | 14% |
| DIEBOLD NIXDORF AG | 73.09 | = | 87.30 | + | -14.21 | NA | NA |
| DORMAKABA HOLDING AG | 775.58 | = | 1028.95 | + | -253.37 | 30% | 24% |
| ECONOCOM GROUP SE | 5.96 | = | 5.20 | + | 0.76 | 60% | 67% |
| EVRY ASA | 3.31 | = | 6.11 | + | -2.80 | 22% | 14% |
| FIDESSA GROUP PLC | 28.51 | = | 2.71 | + | 25.80 | 0% | 84% |
| GEMALTO N.V. | 49.50 | = | 0.49 | + | 49.01 | 4% | 29% |
| HEXAGON AB | 41.80 | = | 37.10 | + | 4.70 | 36% | 39% |
| HUBER UND SUHNER AG | 43.46 | = | 41.51 | + | 1.95 | 8% | 10% |
| INDRA SISTEMAS | 11.41 | = | 7.43 | + | 3.97 | 13% | 18% |
| INFINEON TECHNOLOGIES AG | 22.90 | = | 14.58 | + | 8.31 | 19% | 32% |
| INGENICO GROUP SA | 89.01 | = | 64.86 | + | 24.15 | 9% | 12% |
| IQE PLC | 1.54 | = | 0.46 | + | 1.08 | 9% | 37% |
| ISRA VISION AG | 42.52 | = | 18.05 | + | 24.47 | 15% | 36% |
| JUST EAT PLC | 8.80 | = | 2.83 | + | 5.97 | 20% | 74% |
| LOGITECH INTERNATIONAL SA | 28.12 | = | 24.49 | + | 3.63 | 62% | 81% |
| MELEXIS NV | 84.37 | = | 44.16 | + | 40.21 | 45% | 89% |
| MICRO FOCUS INTERNATIONAL PLC | 28.42 | = | 8.30 | + | 20.12 | 12% | 32% |
| NOKIA OY | 3.89 | = | 1.76 | + | 2.13 | 6% | 26% |
| REPLY SPA | 46.17 | = | 19.11 | + | 27.06 | 17% | 43% |
| RIB SOFTWARE SE | 24.73 | = | 5.89 | + | 18.84 | 11% | 84% |
| SAP SE | 93.54 | = | 68.57 | + | 24.97 | 71% | 96% |
| SCOUT24 AG | 34.03 | = | 17.19 | + | 16.83 | 15% | 27% |
| SILTRONIC AG | 122.30 | = | 142.62 | + | -20.32 | 80% | 75% |
| SOITEC | 59.45 | = | 15.08 | + | 44.37 | 23% | 93% |
| SOPHOS GROUP PLC | 6.42 | = | -0.86 | + | 7.28 | NA | NA |
| STMICROELECTRONICS NV | 18.21 | = | 15.11 | + | 3.10 | 19% | 23% |
| THE SAGE GROUP PLC | 8.99 | = | 5.10 | + | 3.89 | NA | NA |
| TIETO OYJ | 25.98 | = | 24.76 | + | 1.22 | 18% | 18% |
| TOMTOM N.V. | 8.26 | = | 7.30 | + | 0.95 | NA | NA |
| X FAB SILICON FOUNDRIES EV | 9.60 | = | 4.85 | + | 4.76 | 7% | 19% |
| XING SE | 266.51 | = | 105.45 | + | 161.06 | NA | NA |



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