



EFFAS THE EUROPEAN FEDERATION  
OF FINANCIAL ANALYSTS SOCIETIES

# Measurement, Reporting and Valuation of Intellectual Assets - the Investor View

---

*OECD Experts Workshop, Washington DC*

*US National Academy of Sciences*

*October 17, 2008*

**Alexander G. Welzl**  
EFFAS CIC European Coordinator

# About EFFAS - a standard setter in terms of investment professionals' requirements



- Set up in 1962 as a professional association for nationally-based investment professionals associations in Europe
- Umbrella organisation: 25 member organisations, representing more than 14,000 investment professionals
- Head Office: Frankfurt am Main
- EFFAS executive bodies: AGM and Executive Management Committee (EMC)

**Chairman: Giampaolo Trasi**  
**Deputy Chairman: René Willemsen**

# EFFAS

## – setting standards with a global footprint

---

### EFFAS has 6 permanent commissions

- EFFAS Commission on Intellectual Capital (CIC)
- EFFAS European Bond Commission (EBC)
- EFFAS Commission on ESG (ESG)
- EFFAS Financial Accounting Commission (FAC)
- EFFAS Market Structure Commission (MSC)
- EFFAS Training and Qualification Commission (TQC)

### Association of Certified International Investment Analysts (ACIIA®)

As a founding member of the global training association (ACIIA®), EFFAS offers the Certified International Investment Analyst (CIIA®) designation. The CIIA® ensures tailor-made professional qualification by offering global, as well as local market knowledge within its examination structure.

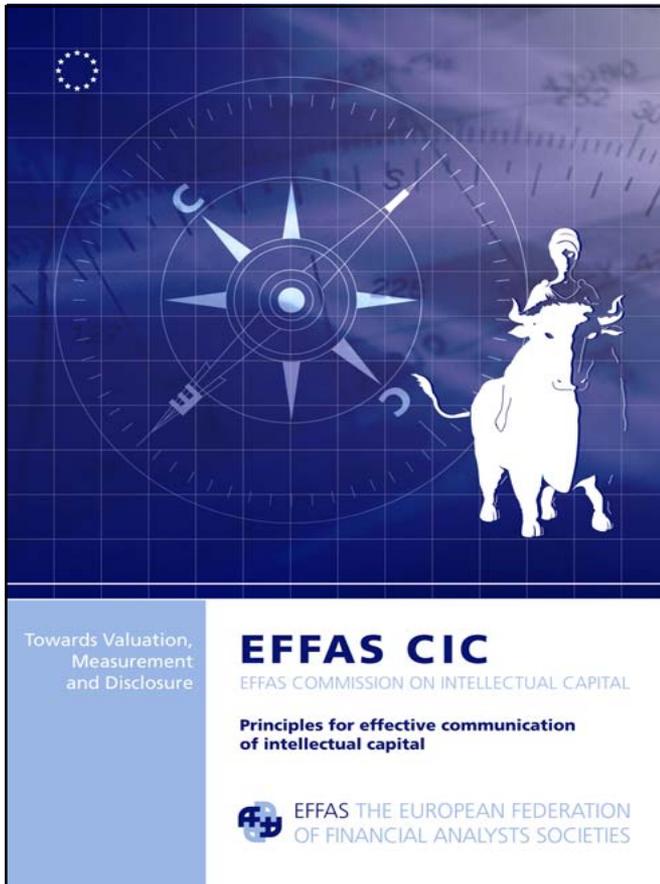
ACIIA® represents over 30,000 investment professionals world-wide.



# Intellectual Capital

## – disclosure and valuation in the 21st century

---



### EFFAS Commission on Intellectual Capital (EFFAS CIC)

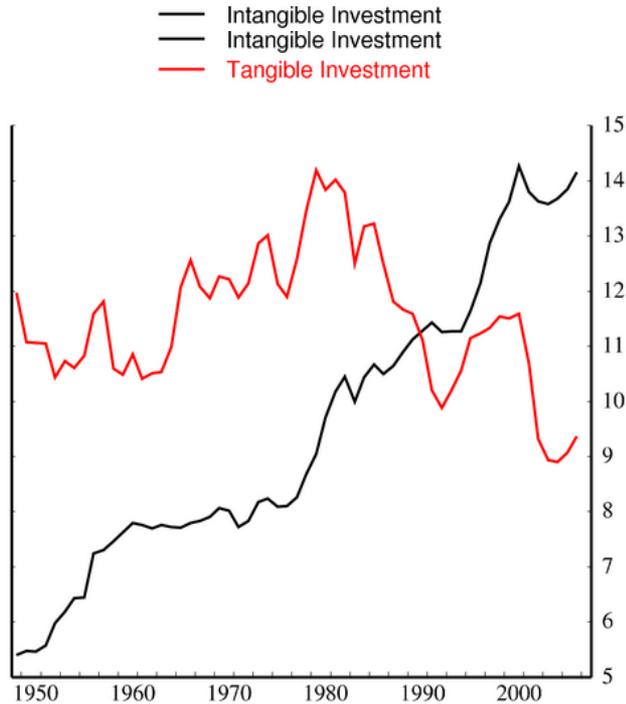
- Founded in 2006
- Chairman: Giampaolo Trasi  
European Coordinator: Alexander G. Welzl
- Global pioneers in investment professionals community
- Ten commandments of intellectual capital measurement, disclosure and valuation
- Sector specific approach: development of industry specific intellectual capital indicators

EFFAS 'Principles for Effective Communication of Intellectual Capital', 2008

[http://www.effas.com/pdf/EFFAS\\_CIC\\_web.pdf](http://www.effas.com/pdf/EFFAS_CIC_web.pdf)

# 20th Century

## - Growing Importance of Intellectual Assets



Business investment in US  
(ratio to business output)

### ■ Reflected in corporate expenditure:

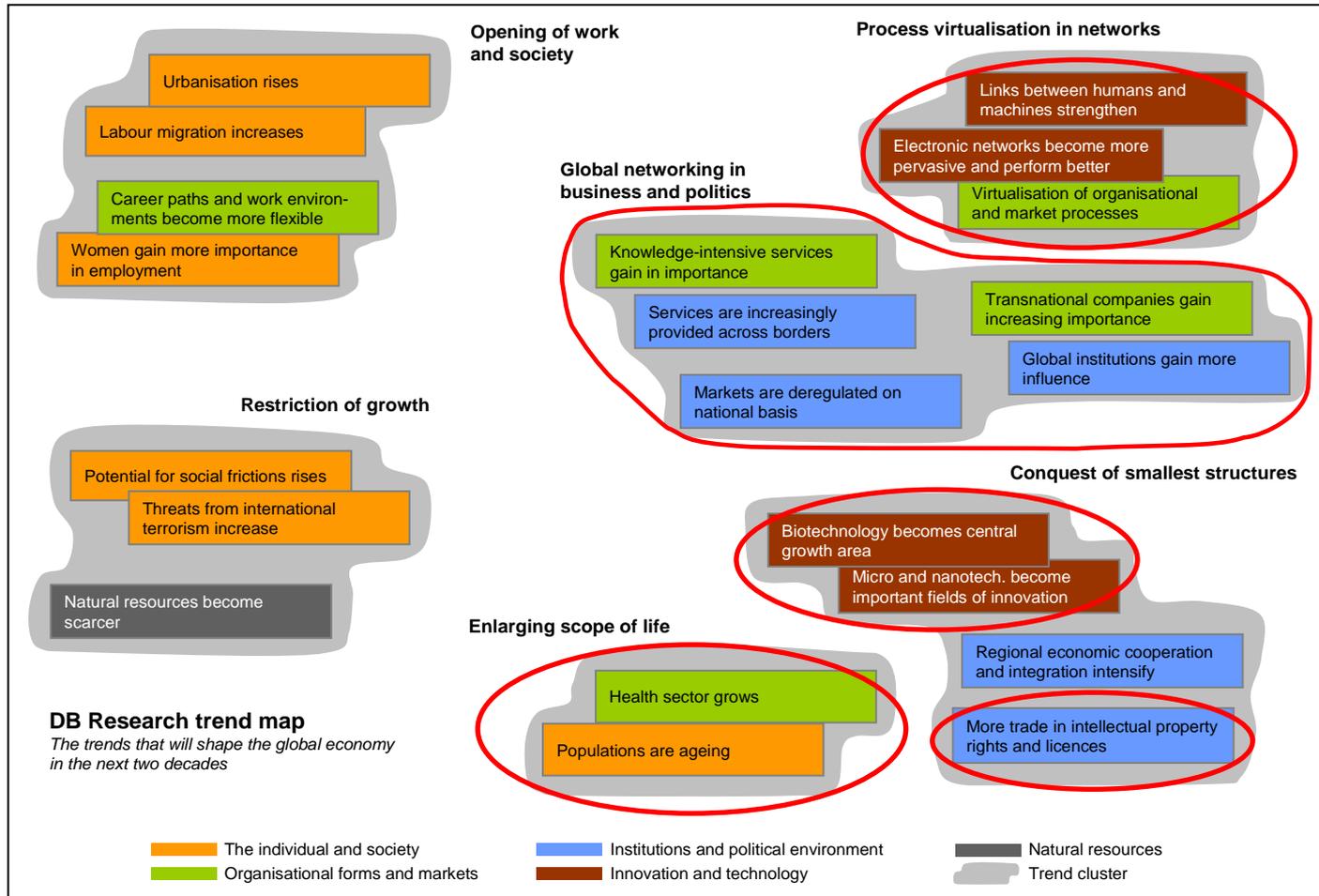
- Investments in intellectual assets are matching to those in tangible capital
- U.S. intangible business investment was more than \$1 trillion in the late 1990s: software, innovation (R&D, design, etc.) and firm competitiveness (brand, human capital, organisation)
- In first 6 years of this decade: intangible business investment 40% larger than tangible investment

### ■ G6 and EU-15:

- R&D-intensive producers and knowledge-intensive service providers in 2002 made up one third of economic output in G6 and EU-15

Sources: Corrado, US Federal Reserve Board (2007);  
Hofmann, DB Research (2006); Tojo, OECD (2008)

# 2020 - Trends in the global knowledge economy



Source:  
Hofmann,  
Deutsche Bank  
Research (2006)

# Intellectual assets

## – The fourth Production Factor

---

### OECD Definition of Intellectual Capital/Intellectual Assets (2008):

‘Resource utilised in future value creation without a physical embodiment’. It includes

- Proprietary Knowledge
- Human Capital
- Relational Capital
- Organisational Capital

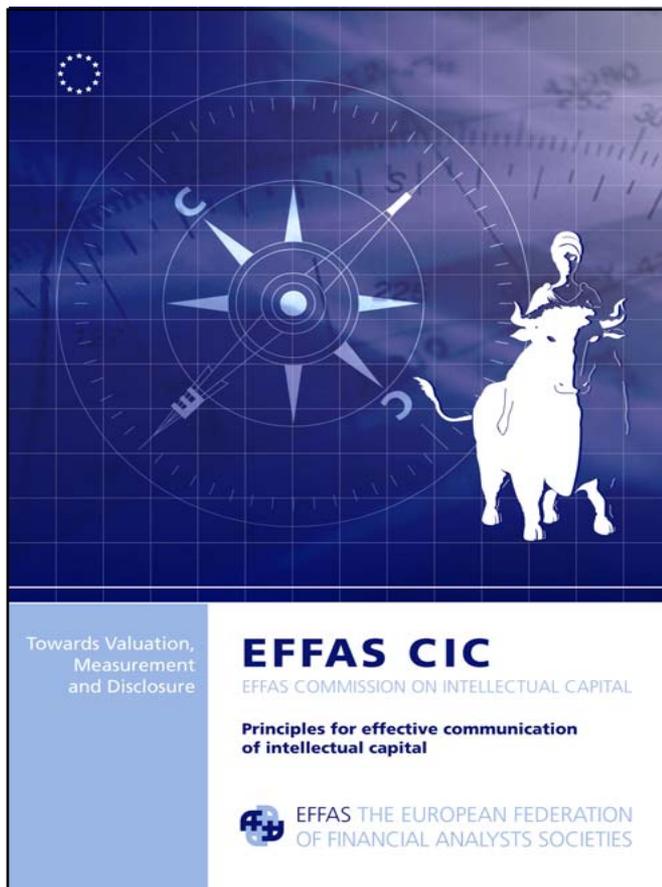
### EFFAS Definition of Intellectual Capital/Intellectual Assets (2008):

- Staff and management skills, human capital
- Software
- R&D and Innovation
- Brands and patents
- Strategies
- Processes
- Relationships with suppliers and customers



# The 10 EFFAS Principles for Intellectual Capital-Disclosure

---



1. Clear link to future value creation
2. Transparency of methodology
3. Standardisation
4. Consistency over time
5. Balanced trade-off between disclosure and privacy
6. Alignment of interests between company and investors
7. Prevention of information overflow
8. Reliability and responsibility
9. Risk assessment
10. Effective disclosure placement and timing

# EFFAS Recommendation of IC-Disclosure Instruments

---

**Corporate Intellectual Capital and IC-based value creation should be disclosed:**

**As part of the Annual Report:**

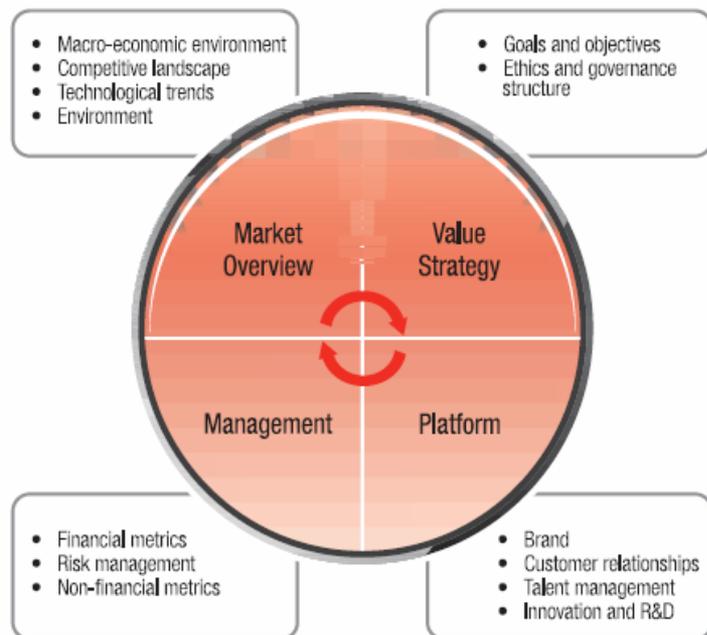
- **Included in the 'Management Commentary' (or 'Management Discussion and Analysis')**
- **Best practice case: Infosys Technologies Ltd., India**

**As a separate Intellectual Capital Report:**

- **In the context of the whole corporate reporting system**
- **Best practice case: Infineon Technologies Austria AG (IFAT), Austria/Europe**



# Infosys Technologies' Value Reporting Disclosure Model



The following sets of metrics are included in Infosys' Corporate Value Reporting :

- Brand valuation
- Balance sheet including intangible assets
- Economic Value-Added (EVA®) statement
- Intangible asset score sheet
- Human resource accounting and value-added statement

# Infosys' Intangible Assets Score Sheet

External structure – our clients			Internal structure – our organization			Competence – our people		
	2008	2007		2008	2007		2008	2007
			<b>Growth / renewal</b>					
Revenue growth (%)			R&D			Total employees	91,187	72,241
In US Dollar terms	35	44	R&D / total revenue (%)	1.20	1.20	Added during the year		
In Rupee terms	20	46	R&D / value-added (%)	1.36	1.40	Gross	33,177	30,946
Exports / total revenue (%)	90	98	Technology in vestment			Net	18,946	19,526
Clients			Investment / revenue (%)	2.67	3.44	Laterals added	8,523	8,023
Total	538	500	Investment / value-added (%)	3.00	4.01	Staff education index	2,51,970	2,03,270
Added during the year	170	160	Total investment			Employees – No. of nationalities	70	65
Marqué clients			Total investment / total revenue (%)	8.95	10.87	Gender classification (%)		
Total	113	114	Total investment / value-added (%)	10.08	12.71	Male	67.5	69.1
Added during the year	24	26				Female	32.5	30.9
Revenue contribution (%)	46	44				No. of non-Indian national employees	3,678	2,028
Revenue Derived – No. of countries	58	54						
			<b>Efficiency</b>					
Sales / Client			Sales per support staff			Value-added / employee (Rs. crore)		
US \$ million	7.76	6.18	US \$ million	1.08	0.92	Software professionals	0.19	0.19
Rs. crore	31.03	27.79	Rs. crore	4.32	4.14	Total employees	0.18	0.18
Sales & marketing expenses / revenue (%)	5.49	6.69	General & admin expenses / revenue (%)	7.97	8.03	Value-added / employee (\$ million)		
DSO (days)	72	64	Average proportion of support staff (%)	4.71	5.18	Software professionals	0.05	0.04
Provision for debts / revenues (%)	0.26	0.19				Total employees	0.05	0.04
			<b>Stability</b>					
Repeat business (%)	97.0	95.3	Average age of support staff (years)	29.4	30.9	Average age of employees (years)	26	26
No. of clients accounting > 5% of revenue	1	1				Attrition %		
Client concentration						Excluding subsidiaries	13.4	13.7
Top client (%)	9.1	7.0				Excluding involuntary separation	12.1	12.2
Top 5 clients (%)	20.9	19.4						
Top 10 clients (%)	31.4	31.4						
Client distribution								
1 million dollar+	310	275						
5 million dollar+	141	107						
10 million dollar+	89	71						
20 million dollar+	47	36						
30 million dollar+	32	25						
40 million dollar+	22	16						
50 million dollar+	18	12						
60 million dollar+	13	11						
70 million dollar+	12	9						
80 million dollar+	10	4						
90 million dollar+	6	4						
100 million dollar+	6	3						
200 million dollar+	1	1						
300 million dollar+	1	-						

The above figures are based on Indian GAAP consolidated financial statement



# Infosys Technologies

## – Value Reporting Key Facts

---

- Data collected division wise as well as for subsidiaries worldwide
- Publication: annually (not included in internal quarterly reporting)
- Responsibility for this report: Corporate Finance Team headed by the Chief Financial Controller of the Corporation
- Intangible metrics are co-related to employee data but not directly related to executive compensation model
- Internally similar measures are adopted to evaluate business performance, employees are adjudged based on metrics that are additional to the financials



# Infineon Technologies Austria's Intellectual Capital Reporting – 2008 and beyond

---



- **Triennial publication of IFAT Intellectual Capital Report**

- Publication date of ICR business year 07/08: Q4 2008

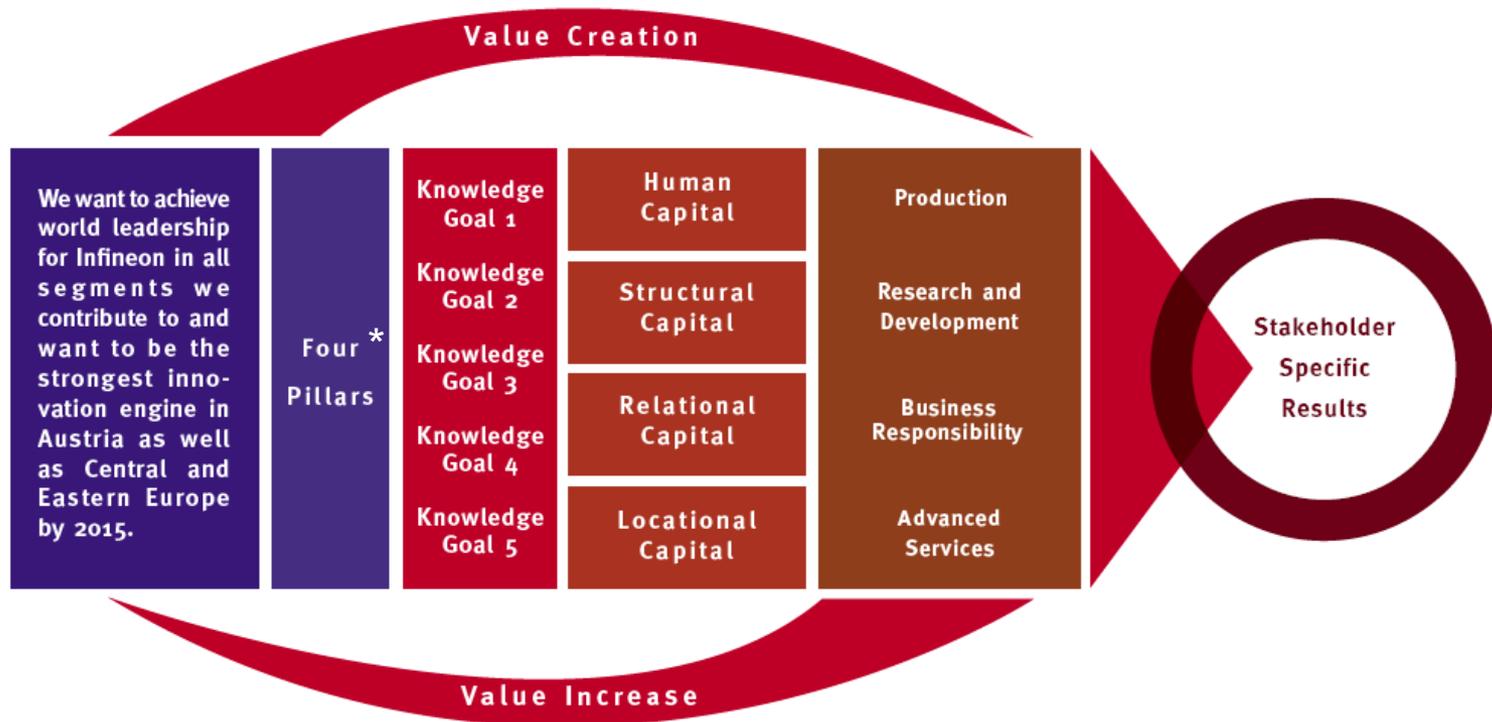
- **Consistent indicator framework**

- Majority of indicators of ICR 05 published again 2008
- Internal benchmarking: time series and interpretation on aggregated level (IFAT)

- **Strategic and process focus**

- Strategic long-term and mid-term goals ('knowledge goals') as in ICR 05
- ICR model of corporate IC-based value creation processes as introduced in 2005

# Infineon's Intellectual Capital Report Model



\* Infineon's Four Pillars: Profitable Growth / Customer Focus / Collaborative Leadership / Operational Excellence

# Practical Example - Measurement of IC-based Value Creation

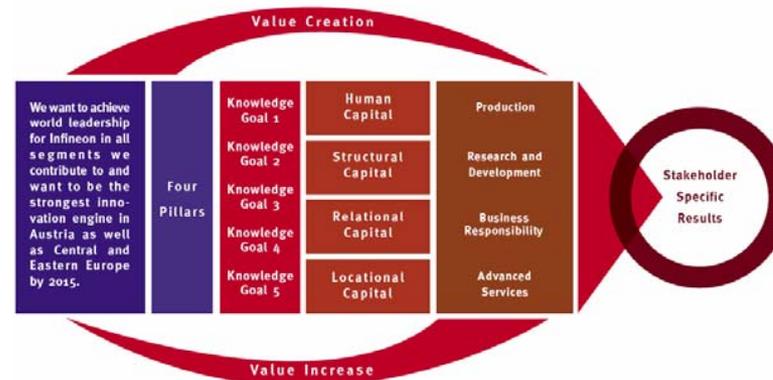
## STEP 2 Input: Human & Relational Capital indicators

- International employees:	13,9% (35 nationalities)
- Employees changing locations within corporation:	15
- Ratio of female employees:	11,0%
- Female employees in management functions:	3,3%
- Short and long term delegates at Infineon Austria:	25
- Cooperation partners in R&D projects:	77

## STEP 1

### Knowledge Goal 2 ,Life is a network‘:

As a regionally based and globally networked ‘Brainport’ we strive to become a hub for development and application of leading-edge knowledge.



## STEP 4

### Output and Impact Indicators

- Participations at Centers of competence:	10
- Austrian SMEs involved in R&D cooperations:	15

## STEP 3 Indicators of core processes

- New R&D-projects:	26
- finalised R&D-projects:	23
- New products (business unit Power Management & Supply PS):	98
- Share of new products (< 3 years) from turnover (business unit PS):	65%

# Infineon's IC-Report – Structure and Content

## Table of contents



**Trust your brain**

2	<b>Preface</b>
8	<b>The General Framework</b>
10	Brain Port Infineon – regional touch with global reach
13	The Fourth Production Factor – knowledge as a future oriented investment
15	Capitalizing on Brain Power – measure and manage the untouchable
	The Infineon Austria Approach – innovation based value creation
20	<b>The Corporate Strategy</b>
	Infineon Austria's goals and objectives – a roadmap to the future
28	<b>The Intellectual Capital</b>
43	Human Capital – the main source of our future success
47	Structural Capital – inspiring conditions for talented people
53	Relational Capital – global connections for combined brainpower
	Location Capital – Austria, a home for global players
58	<b>The Core Processes</b>
69	Production – leading edge products for ambitious customers
82	Research and Development – pushing the limits
91	Managing Complexity – global Infineon business responsibility in Villach
	Advanced Services – strong support for powerful performance
104	<b>The Results</b>
	Output and Impact – creating added value for our stakeholders
110	<b>The Future Prospects</b>
	Building the Future – Infineon Austria looks ahead
119	<b>The Balance</b>



# ODDO Securities' Human Capital Valuation Model

---

TOP AND BOTTOM LINE IMPACT OF HR THEMES OF ANALYSIS IN THE AEROSPACE-DEFENCE SECTOR

HR theme	Top line impact	Bottom line impact	Weight in model
Governance and HR profile	X	X	25%
Pulling power and recruitment	X		17%
Integration and career management	X		7%
Motivation and satisfaction	X	X	24%
Operational HR management	X	X	27%

TABLE 7 SOURCE: ODDO SECURITIES



# Criteria and Indicators

## – three tiered Analysis and Evaluation

HR themes	Tier 1 criteria	Weighting	Tier 2 criteria	Tier 3 criteria
Governance and HR profile Pulling power and recruitment	Country HR potential	3%		
	Expansion model	8%	M&A integration track record	
	Average age	2%	R&D employees	Share of engineers and managers, average length of services
	HR function represented on the executive committee	2%	HR organisation	
	HR transparency	2%	HIRS & reporting	
	Technological shifts	8%		
Integration and career management Motivation and satisfaction	Size pulling power	2%	Relations with universities	Image rankings
	International pulling power	4%	Applications/headcount	Rate of acceptance of job offers/new hires
	Economic pulling power	2%	Quality of recruitment process	
	Business pulling power	3%	Recruitment orientation	
	Employee share ownership	6%		
	Net growth in headcount	3%		
	Integration and frequency of annual reviews, career management	2%	Corporate university and promotion	Work/life balance
	Quality and efficacy of training	2%	Access to and emphasis on training	
Operational HR management	Management of reorganisations and restructuring	10%		Corporate culture
	Key personnel departures	5%	Management of key skills	Leadership provided by senior managers, internal networks
	Absenteeism	2%		
	Social dialogue and labour relations	7%	History of strikes	
Governance and HR profile	Average salary cost	2%		
	Payroll	2%		
	Frequency and severity of workplace accidents	2%	Professional illnesses	
	Quality of local management and HR	5%	Quality and HR	
	Operating margin per employee	6%		
	Employee liabilities	10%		
Total	24	100%	14	6

TABLE 8 | SOURCE : ODDO SECURITIES

# The Result – Sector specific Recommendations

AEROSPACE-DEFENCE – SUMMARY OF HR SCORING, HUMAN RESOURCES RECOMMENDATIONS AND FINANCIAL RECOMMENDATIONS

Dominant positioning	Company	Evaluation	Ranking	Human resources recommendations	Financial recommendations
Prime contractors	Boeing	48.0	13	High risk (4)	Not covered
	Dassault Aviation	64.5	2	Opportunity (2)	Not covered
	EADS	47.8	14	High risk (4)	Reduce (3)
	Lockheed Martin	61.0	6	Opportunity (2)	Not covered
	Northrop Grumman	57.5	10	Moderate risk (3)	Not covered
Systems manufacturers	Bae Systems	60.3	8	Opportunity (2)	Not covered
	Finmeccanica	56.1	12	Moderate risk (3)	Buy (1)
	Raytheon	58.2	9	Moderate risk (3)	Not covered
	Thales	62.4	4	Opportunity (2)	Add (2)
Equipment makers	Goodrich	57.1	11	Moderate risk (3)	Not covered
	Honeywell	63.0	3	Opportunity (2)	Not covered
	Latécoère	61.3	5	Opportunity (2)	Reduce (3)
	Rolls-Royce	60.8	7	Opportunity (2)	Not covered
	Safran	47.7	15	High risk (4)	Buy (1)
	Zodiac	73.0	1	Strong opportunity (1)	Buy (1)
<b>Sector average</b>		<b>58.6</b>			
Prime contractors average		55.8			
Systems manufacturers average		59.2			
Equipment makers average		60.5			

TABLE 2 | SOURCE: ODDO SECURITIES

# Intellectual Capital - the road ahead

---

Progress in the disclosure of Intellectual Capital may only be achieved by clearly aligning interests between the company, asked to provide a higher quantity of better quality information to the outside world (with associated costs), and the investor, who will use this information within his valuation framework.

The virtuous circle that we hope to see is one whereby:

- the company first of all becomes used to managing and measuring its intangible value drivers
- it subsequently raises their visibility by reporting such drivers to the market
- thereby triggering a greater valuation in respect of competitors
- this will reduce the cost of capital, forcing out and justifying further efforts in terms of communication and transparency in respect of this fundamental component of enterprise value.

# Thank you!

---



**EFFAS**  
**The European Federation**  
**of Financial Analysts Societies**

Frankfurt am Main

Operational Office:  
Einsteinstrasse 5  
DE-63303 Dreieich/Frankfurt a.M.

Tel. +49-61 03-58 33-48

Fax. +49-61 03-58 33-35

Email: [info@effas.com](mailto:info@effas.com)

Internet: [www.effas.com](http://www.effas.com)