

Valuing corporate Value Creation in the 21st Century – Yes we can!

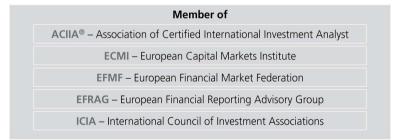
Nikkei Business Daily Forum 2008, Tokyo

Aoyama Diamond Hall 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)

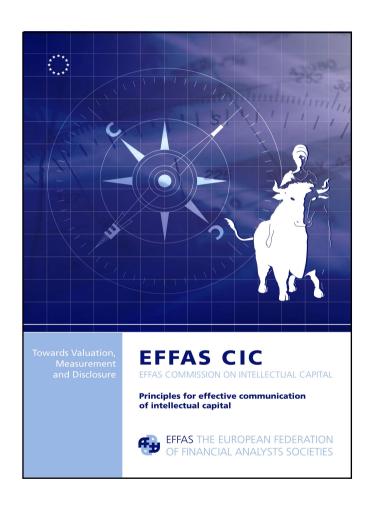
Association of Certified International Investment Analysts (ACIIA®)

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**)

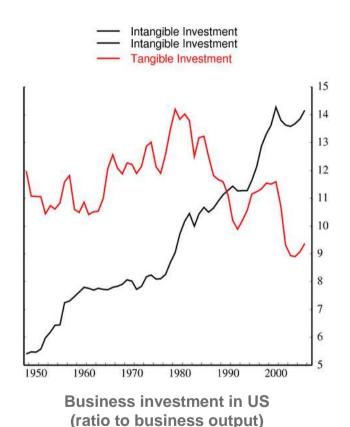
- Founded in 2006
- Chairman: Giampaolo Trasi
 European Coordinator: Alexander G. Welzl
- Global pioneers in investment professionals community
- Ten commandments of intellectual capital measurement, disclosure and valuation
- Sector specific approach: development of industry specific intellectual capital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

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

http://www.effas.com/pdf/EFFAS_CIC_web.pdf

20th Century

- Growing Importance of Intellectual Assets



Reflected in corporate expenditure:

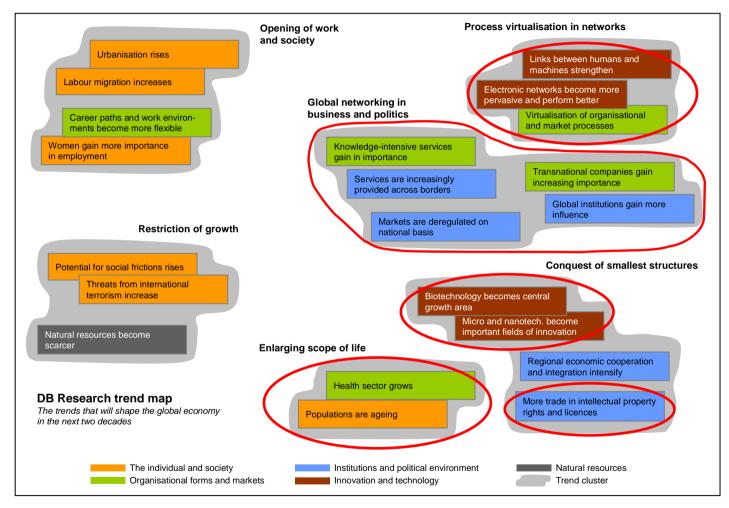
- Investments in intellectual assets are matching to those in tangible capital
- U.S. intangible business investment was more than \$1 trillion in the late 1990s: software, innovation (R&D, design, etc.) and firm competitiveness (brand, human capital, organisation)
- In first 6 years of this decade: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

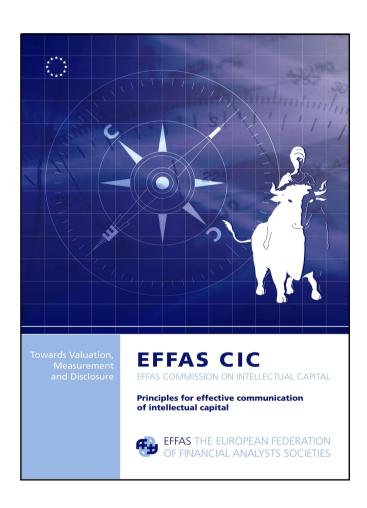
'Resource utilised in future value creation without a physical embodiment'. It includes

- 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, customers and partners

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 CIC's sector specific Approach- Towards a new Analysis and Valuation Scheme

"Accurate financial accounting data are neither inherently right nor wrong, they are only more or less useful for the questions that people want answered."

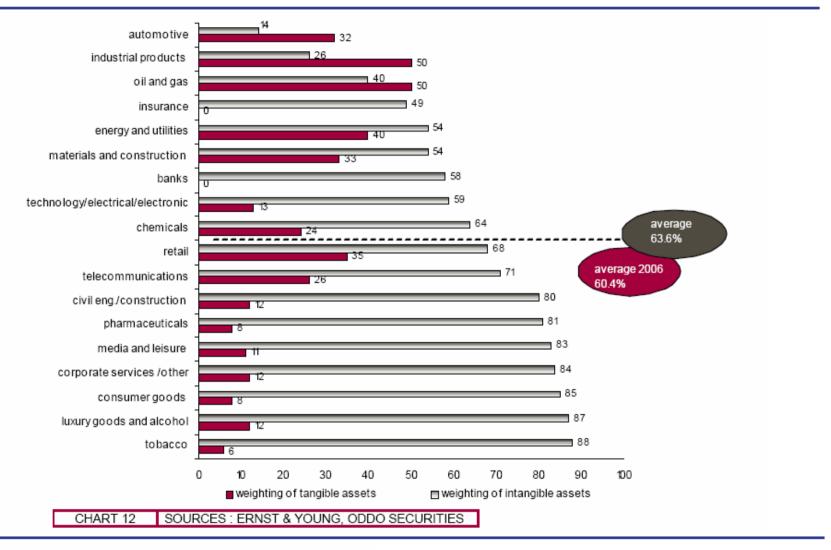
Charles Hulten, 2008

Professor of Economics, University of Maryland and NBER, Senior Fellow to The Conference Board (USA)

EFFAS IC Business Case Telecom Industry

- The data presented in the following slides is based on research conducted in recent months by ODDO Securities, France in Europe and the US.
- The results were published by ODDO in a research paper in October 2008.
- This research is part of and contributes to EFFAS' Commission on Intellectual Capital (CIC) sector specific approach in collaboration with Prof. Michael D. Kimbrough, Harvard Business School.
- EFFAS CIC aims to understand IC-driven corporate value creation and to develop sector specific intellectual capital metrics to be used by analysts and investment professionals for their recommendations and investment decisions.

Intellectual Capital/intangible Assets already dominate in many Industry Sectors



The Telecom Sector - an Intellectual Capital driven Industry

- Shareholder value creation is not derived exclusively from the state of being licensed to operate network infrastructure to serve subscribers
- The weight of intangible assets in the valuation of the Telecom sector is 71% vs only 26% for tangible assets.
- Long considered to be highly capital-intensive, the sector is now among those whose principal valuation driver is intellectual capital.
- The sound management of intellectual capital plays a key role in value creation for a telecom operator
- Given growth constraints (regulation, subscriber saturation, fierce competition, etc.) and changes in communication methods, an approach based on the analysis of operators' intellectual capital permits the identification of numerous strengths and weaknesses that are revealed much later in companies' financial accounts.
- Innovation is a major opportunity for Telecom equipment makers and a doubleedged sword for Telecom operators

Three main Components of Intellectual Capital

Human Capital (at individual level and throughout organisation)

- 10 of 21 HR criteria account for 70% of the HR analysis model for the Telecom sector
- 10 criteria: growth model, age pyramid management, size-related attractiveness, employee share ownership, management or reorganisational/restructuring measures, departure/arrival of key personnel, workplace climate and dialogue, quality of local management, operating margin per employee and social liabilities

Structural/Organisational Capital (internal/company level)

 technological capital, intellectual property, innovation capacity, explicit and implicit internal processes, corporate culture and language, the ability to adapt operating rules rapidly to changes in conditions, etc.;

Relational Capital (external/networking level)

- interrelationships woven between a company and its customers, suppliers and partners

Human Capital Criteria for the Telecom Sector

HR focuses	Rank 1 criteria	Weighting	Nature of criterion
	Growth model	10.0%	Quantitative and qualitative
Governance and	Age pyramid management	6.0%	Quantitative and qualitative
HR profile	HR representation on Executive Committee	4.0%	Qualitative
	HR transparency	2.0%	Quantitative and qualitative
	Size-related attractiveness	5.0%	Quantitative (relative to sector)
Attractiveness and	International presence-related attractiveness	4.0%	Quantitative
recruitment	Economic attractiveness	2.0%	Quantitative
	Average wage costs	2.0%	Quantitative (relative to sector)
	Employee share ownership	5.0%	Quantitative
	Growth in headcount	2.0%	Quantitative (relative to sector)
Career integration and planning	Integration, annual review rate, career planning	4.0%	Quantitative and qualitative
	Training quality and effectiveness	2.0%	Quantitative and qualitative
	Management of reorganisational/restructuring measures	10.0%	Mainly qualitative
Motivation and satisfaction	Departure/arrival of key personnel	5.0%	Qualitative
Satisfaction	Staff turnover	3.0%	Quantitative
	Absenteeism	3.0%	Quantitative
	Workplace climate and dialogue	10.0%	Mainly qualitative
	Payroll management	2.0%	Quantitative
Operational HR management	Quality of local management Operating margin per employee	5.0% 5.0%	Qualitative Quantitative
	Social liabilities (pension funds, healthcare, class actions)	9.0%	Quantitative
Total	21 criteria	100.0%	

TABLE 21 SOURCE : ODDO SECURITIES



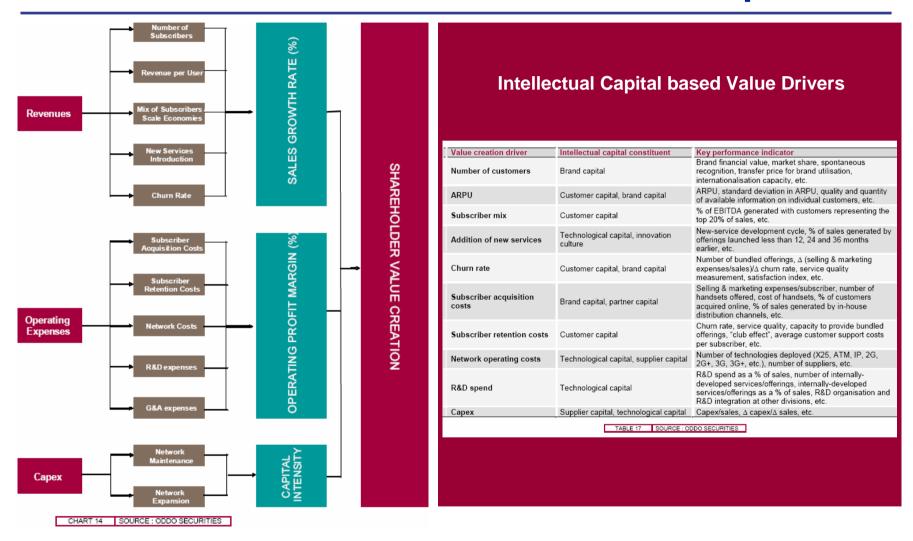
Corporate ,Ecosystem' – Organisational Capital and external Relational Capital in Telcos

Ecosystem criteria	Equipment makers	Operators	Nature of criterion
Corporate culture, internal organisation	4.0%	2.0%	Qualitative
Innovation/R&D/patents	11.0%	4.0%	Quantitative and qualitative
Brand	2.0%	3.0%	Quantitative and qualitative
Supply chain, logistics, industrial partnerships	4.0%	2.0%	Qualitative
Distribution network	2.0%	5.0%	Qualitative
Product and service quality	3.0%	3.0%	Quantitative and qualitative
Customer satisfaction	3.0%	4.0%	Quantitative and qualitative
Total	29.0%	23.0%	

TABLE 22 SOURCE : ODDO SECURITIES



Intellectual Capital based Value Creation – Value Creation Drivers in Telecom Corporations



Assessment of corporate Intellectual Capital- Telecom Operators/Equipment Manufacturers

Dominant positioning	Stock	Human resources	Licence to operate	Ecosystem	Intellectual capital	Ranking
	Alcatel-Lucent:	7.9	0.5	14.9	23.3	7
	Cisco	10.1	0.5	23.8	34.4	2
	Ericsson	9.8	1.0	18.9	29.7	5
Telecom equipment	Gemalto	7.8	1.0	20.8	29.6	4
manufacturers	Motorola	5.9	0.5	11.6	18.0	8
	Nokia	11.1	1.0	22.7	34.8	1
	Oberthur	7.7	1.0	19.0	27.7	6
	Tandberg	10.3	1.0	19.2	30.5	3
	AT&T	8.5	1.0	16.0	25.2	4
	Belgacom	7.1	1.0	12.5	20.2	13
	Bouygues	10.2	1.0	10.9	21.1	12
	British Telecom	8.8	1.5	15.5	25.1	5
	Deutsche Telekom	7.2	1.0	11.2	19.1	14
	France Telecom	8.4	0.5	15.4	24.1	9
	lliad	8.6	1.5	17.9	27.0	1
	KPN	7.5	1.0	14.5	22.5	11
Telecom operators	Maroc Telecom	9.4	1.5	14.7	25.0	7
	Mobistar	8.9	1.0	14.9	24.5	8
	OTE	6.1	1.0	12.3	18.7	15
	Sprint	4.9	0.5	6.0	11.3	17
	Telecom Italia	7.3	1.0	10.8	18.5	16
	Telefonica	10.0	0.5	15.3	25.1	6
	Verizon	8.7	1.5	14.3	23.9	10
	Vivendi	9.8	1.0	15.9	26.2	3
	Vodafone	10.3	1.0	15.3	26.3	2
Average - telecom equipment manufacturers		8.8	0.8	18.9	28.5	_
Maximum possible score – equipment manufacturers		15.0	1.0	29.0	45.0	
Average telecom operators		8.3	1.0	13.7	23.0	
Maximum possible score - t	elecom operators	15.0	2.0	23.0	40.0	

TABLE 35 SOURCES: ODDO SECURITIES



Assessment of corporate Innovation Capacity- Telecom Operators/Equipment Manufacturers

Dominant		Upstream innova	tion (product	s/marketing)	Core innov (processes/pro		Downstream innovation (markets)			Pricing power		
positioning	Stock	Market positioning (out of 12)	Historic strategy (out of 8)	R&D (out of 12)	Market positioning (out of 12)	Historic strategy (out of 8)	Market positioning (out of 12)	Historic strategy (out of 8)	Growth vs. the market (out of 10)	Credibility /image (out of 8)	Op. margin (out of 10)	Score
	Alcatel-Lucent:	4.0	5.0	8.0	7.0	6.0	6.0	5.0	4.0	2.5	1.5	49.0
	Cisco	10.0	7.0	7.0	8.0	6.0	10.0	7.0	6.0	7.0	7.5	75.5
T-1	Ericsson	8.0	6.0	8.0	7.0	6.0	8.0	6.0	7.0	6.0	5.5	67.5
Telecom equipment	Gemalto	10.0	7.0	5.0	9.0	6.0	10.0	6.0	3.0	7.0	3.0	66.0
manufacturers	Motorola	3.0	6.0	7.0	6.0	5.0	5.0	5.0	2.0	2.0	1.0	42.0
	Nokia	7.0	5.5	6.5	12.0	7.0	8.0	6.0	6.5	6.0	5.5	70.0
	Oberthur	7.0	4.5	4	7.5	5.0	8.0	5.0	7.0	7.0	4	59.0
	Tandberg	10.0	7.0	5.0	8.5	7.5	6.5	4.5	7.0	7.0	7.0	
	AT&T	7.0	6.0	1.0	6.5	3.5	6.5	4.0	4.0	6.0	5.5	
	Belgacom	5.0	3.0	1.0	7.0	4.0	6.5	4.0	3.5	5.0	10.0	
	Bouygues	5.5	3.0	1.0	6.0	4.0	7.0	3.5	9.0	5.0	3.5	
	British Telecom	7.0	4.0	1.0	7.0	5.0	6.0	4.0	4.5	6	4.5	
	Deutsche Telekom	6.0	3.0	1.0	6.0	4.0	7.0	4.0	3.5	5.0	4	43.5
	France Telecom	10.5	6.5	2.5	8.0	3.0	9.5	2.0	5.0	6.5	6.0	59.5
	lliad	8.0	8.0	0.5	9.0	7.0	11.0	7.0	10.0	6.0	5.5	
	KPN	9.0	6.5	2.0	7.0	4.0	10.0	6.0	5.0	6.0	6.0	61.5
Telecom operators	Maroc Telecom	7.0	4.5	0.5	5.0	3.5	6.0	4.0	6.5	7.0	10.0	54.0
	Mobistar	8.0	5.5	1.0	8.5	5.5	7.0	5.0	7.0	4.5	8.0	60.0
	OTE	5.0	3.5	1.0	6.0	4.0	5.5	3.5	7.0	4.5	5.5	45.5
	Sprint	4.0	7.0	1.0	6.0	5.0	5.0	4.0	2.0	2.0	0.5	36.5
	Telecom Italia	6.5	4.0	2.5	6.0	3.0	6.0	4.0	3.0	4.5	6.0	45.5
	Telefonica	9.0	7.0	2.0	9.0	7.0	10.0	7.0	6.0	7.0	6.5	70.5
	Verizon	8.5	5.0	1.0	8.0	5.0	7.5	4.5	6.0	6.5	5.0	57.0
	Vivendi	7.5	6.0	1.0	7.0	5.0	0.8	6.0	7.0	5.5	6.0	59.0
	Vodafone	7.0	5.0	1.0	8.0	5.0	6.0	5.5	4.0	7.0	9.0	57.5
Average - telecom e manufacturers	quipment	7.4	6.0	6.3	8.1	6.1	7.7	5.6	5.3	5.6	4.4	62.4
Average telecom op	erators	7.1	5.1	1.2	7.1	4.6	7.3	4.6	5.5	5.5	6.0	54.0
Average - Telecom:	s sector	7.2	5.4	2.9	7.4	5.0	7.4	4.9	5.4	5.5	5.5	56.7
Maximum possible	score	12.0	8.0	12.0	12.0	8.0	12.0	8.0	10.0	8.0	10.0	100.0

TABLE 38 SOURCES: ODDO SECURITIES



The Goal and Result - Sector specific Analyst IC Recommendations

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

Dominant positioning	Company	Evaluation	Ranking	Human resources recommendations	Financial recommendations
AN THE	Boeing	48.0	13	High risk (4)	Not covered
	Dassault Aviation	64.5	2	Opportunity (2)	Not covered
Prime contractors	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
	Bae Systems	60.3	8	Opportunity (2)	Not covered
Systems manufacturers	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)
	Goodrich	57.1	11	Moderate risk (3)	Not covered
	Honeywell	63.0	3	Opportunity (2)	Not covered
Equipment	Latécoère	61.3	3 5 7	Opportunity (2)	Reduce (3)
	Rolls-Royce	60.8	7	Opportunity (2)	Not covered
makers	Safran	47.7	15	High risk (4)	Buy (1)
	Zodiac	73.0	1	Strong opportunity (1)	Buy (1)
Sector average Prime contractors :	average	58.6 55.8	5	4-20.60	

TABLE 2 | SOURCE: ODDO SECURITIES

59.2

60.5

Systems manufacturers average

Equipment makers average

EFFAS Recommendation - IC-Disclosure Instruments for Corporations

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

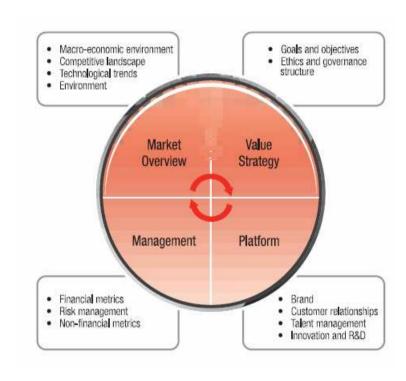
As a separate Intellectual Capital Report:

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

Value Reporting Key Facts - NASDAQ listed Infosys Technologies Ltd.

- 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

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 cl	lients		Internal structure – our orga	nization		Competence – our people			
	2008	2007		2008	2007		2008	2007	
			Growth / rene wal						
Revenue growth (%)			R&D			Total employees	91,187	72,241	
In US Dollar terms	35	44		1.20	1.20	Added during the year			
In Rupee terms	20	46		1.36	1.40	Gross	33,177	30,946	
Exports / total revenue (%)	00	98				Net	18,946	19,526	
Clients			Investment / revenue (%)	2.67	3.44	Laterals added	8,523	8,023	
Total	538	500	The state of the s	3.00	4.01			2,03,270	
Added during the year	170	160				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	1011 1111011111111111111111111111111111	10.00		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				tres of near manual materials employees	5,010	-,	
THE PERSON AND THE PE			Efficiency				-		
Sales / Client			Sales per support staff			Value-added / employee (Rs. crore)			
US \$ million	7.76	6.18		1.08	0.92	Software professionals	0.19	0.19	
Rs. crore	31.03	27.79	(A) 70 T. M.	4.32	4.14	Total employees	0.18	0.18	
Sales & marketing expenses / revenue (%)	5.49	6.69		7.97	8.03	Value-added / employee (\$ million)			
DSO (days)	72		Average proportion of support staff (%)	4.71	5.18	Software professionals	0.05	0.04	
Provision for debts / revenues (%)	0.26	0.19	and the beat of the same of th	9000		Total employees	0.05	0.04	
			Stability				-		
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	3 3 11 4			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	The state of the s						
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

Infineon Technolgies 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

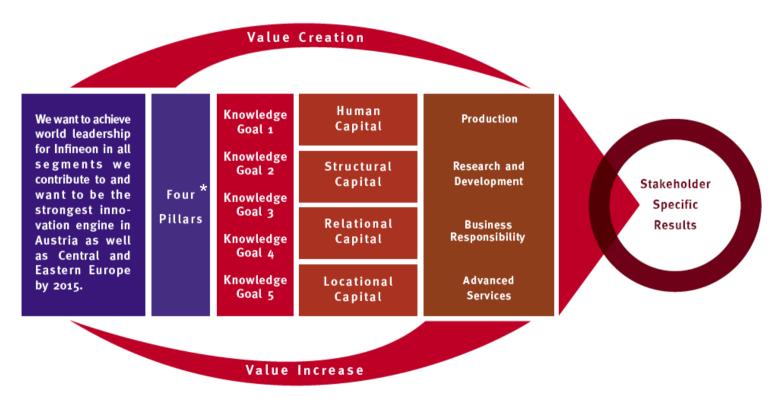
- Strategic long-term and mid-term goals ('knowledge goals') as in ICR 05
- ICR model of corporate IC-based value creation processes as introduced in 2005

Infineon's IC-Report – Structure and Content



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

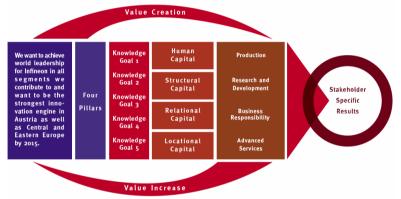
STEP 2 Input: Human & Relational Capital indicators

- 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: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%

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!



EFFASThe European Federation of Financial Analysts Societies

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