P³ Profitable Product Performance

Target Costing inside

Case Study Nestor

Seidenschwarz & Comp.

SIEMENS

Introduction to the Case Study

The case study has been designed to demonstrate the application of the Target Costing methodology using the fictive product Nestor

The following Case Study …

- … aims to demonstrate and explain the usage and process of the **entire Target Costing toolset**.
- … uses a **fictive mobile phone** called **Nestor** targeting the CX-class. Any **resemblance** to a possibly existent or planned phone concept is **pure coincidence**.
- … shows how **data** is entered into the **Target Costing IT tool (Excel screenshots)**.
- … shows examples of how the **output** provided by the application of Target Costing should look like.
- … gives an **overview** how the **results** are to be **read** and **understood.**

Agenda

- **Window of Opportunity and Enthusiasm Model**
- Reverse Calculation
- Product Target Splitting
- Alternatives Generation
- Alternatives Evaluation
- Target Controlling

Window of Opportunity for Nestor

Nestor is targeted to be the first product with full video functionality priced below 200 EUR

Propo-sition

- Be the **top 1** selling product between 200 and 130 € in the **Easter business 2005** to address the opportunity of **"first full video device under 200€ in EMEA"**.

Target market (End-user and operator)

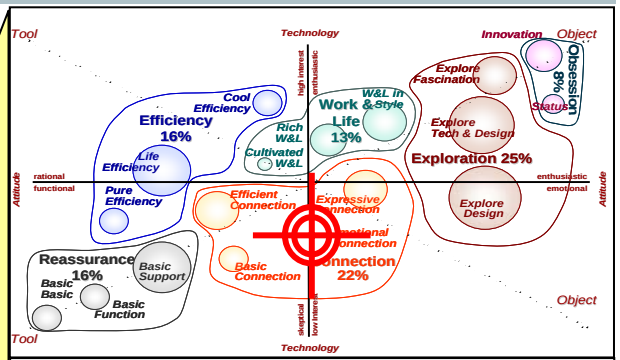
- **End-user (Sub-)Segment:** Emotional Connection; male, female (50:50); 22-40; full time job, low to mid education; strong social community, traditional values
- **Regional Market Focus:** 100% EMEA
- **Sales Channel Split:** Operator 90% / Retail 10%
- **Key operators addressed**: Main European operators (Vod/TMO)
- **Competitor products**: Nokia 3200, Samsung E300, SE T630

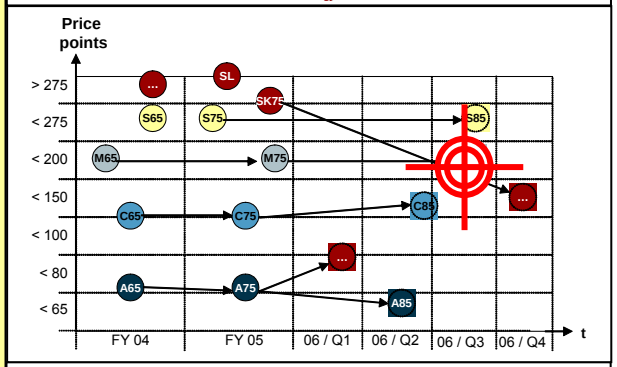
Target positioning in Portfolio

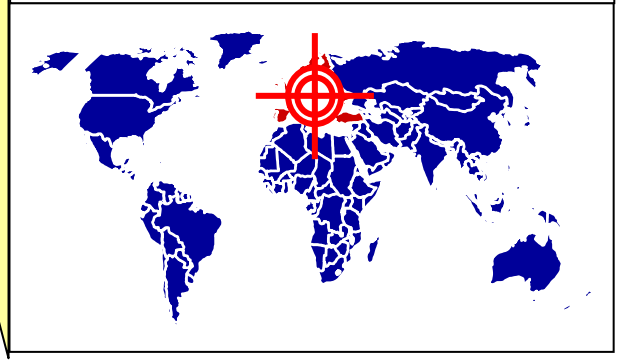
- **Story successor to:** Cerberus
- **Price Point:** Launch at **EUR 190** falling to **EUR 140**
- **Launchdates/ Lifecycle**: Mar. 2005 – Mar. 2006
- **Addressable Market:** 12,5 Mill. units
- **Planned market share / Vol.:** 28% market share = 3,5 Mio units
- **Target Profit:** 7,5% = approx. 45 Mio.€

Product idea

- **Product Idea:** The "Video Device" for sharing personal moments
- **Key theme:** Video streaming and imaging story
- **Key use cases:**
  Operator enhanced traffic and download activities for users that are historically not only voice centric; explore messaging - sharing of info & emotions (videos / text / pictures)
- **Innovation:** Full video functionality in the sub 200 EUR price class







SIEMENS

Enthusiasm Model: Exemplary target use cases for Nestor I

A set of key use case has been identified for Nestor

Key theme:	**Price point:**	**Segment:**	**Region:**
Video and imaging	Launch at EUR 190 falling to EUR 140	Emotional Connection	100% EMEA

Use case	Use case description	Importance	
		End-user	MNO
Use case 1: Take snapshots in darkness	▪ **Situation***: Afternoon, evening / café, bars / meeting friends and nightlife ▪ **Frequencies of use case**: 1-3 times a week ▪ **Typical course of action**: Drinking, having fun and take snapshots in darkness ▪ **Related use cases**:	L M (H) no	L M (H) no
Use case 2: Download video clips	▪ **Situation***: Morning, evening / public transports / going to-from job or shopping ▪ **Frequencies of use case**: 2-4 times / day ▪ **Typical course of action**: Looking at downloaded video clips ▪ **Related use cases**: 2,3	L M (H) no	L M (H) no
Use case 3: Enjoy video streaming	▪ **Situation***: Mainly leisure time / seeing things spontaneously and share them ▪ **Frequencies of use case**: Twice a week ▪ **Typical course of action**: Take a video or stream some funny videos ▪ **Related use cases**:	L M (H) no	L M (H) no

* Describing time, place and circumstances

SIEMENS

Enthusiasm Model: Exemplary target use cases for Nestor II

A set of key use case has been identified for Nestor

Key theme:	**Price point:**	**Segment:**	**Region:**
Video and imaging	Launch at EUR 190 falling to EUR 140	Emotional Connection	100% EMEA

Use case	Use case description	Importance	
		End-user	MNO
Use case 4: Show phone to other people	▪ **Situation***: Day and night / Leisure and work time /show phone to others ▪ **Frequencies of use case**: 2 times / day (initial phase) ▪ **Typical course of action**: Show phone's nice design to others as well as the excellent quality of the content presented on the display	**(L)** **M** **H** **no**	**(L)** **M** **H** **no**
Use case 5: Show audio effects to friends	▪ **Situation***: Day and night / Leisure and work time /show phone to others ▪ **Frequencies of use case**: 2-4 times / day ▪ **Typical course of action**: Show audio quality of music videos and ringer tones ▪ **Related use cases**: 4	**L** **(M)** **H** **no**	**(L)** **M** **H** **no**
Use case 6: Personalize the phone	▪ **Situation***: Morning, evening / public transports / going to-from job or shopping ▪ **Frequencies of use case**: 1 time / week ▪ **Typical course of action**: Changing ringer tone to other music song or downloading other applications to personalize the phone	**(L)** **M** **H** **no**	**L** **(M)** **H** **no**

* Describing time, place and circumstances

Enthusiasm Model: Functional Target Profile

Nestor will create Customer Enthusiasm by offering an outstanding photo/video functionality for a price below 200 EUR

Required air interface: [X] GSM [X] GPRS [ ] EDGE [ ] UMTS [ ] WLAN/ UMA [ ] other: "…"

Preferred form factor: [X] Bar [ ] Slider [ ] Clam [ ] New/ others: "… e.g. swivel-clam"

	End-user requirements				*MNO requirements*				
	not req.	*Basic*	*Perf.*	*Enth.*	*not req.*	*Basic (under fulfilled)*	*Perf. (meet)*	*Enth. (exceed)*	*Target values (value range)*
Make and receive calls (quality of basic functions)		■				△			Tri Band
Appeal to user (design/ material/ form factor			■				△		Classic / high value / metal look and feel
Support imaging and video				■				△	Better than snapshot/ usable in darkness/ outstanding video performance
Support music and audio			■				△		Good acoustic quality supporting the playback of various video formats
Provide gaming		■				△			Standard gaming
Provide outdoor/ leisure features (e.g. sensors)	■				△				Not wanted
Enable messaging			■			△			Share friends and family related moments easily
Support business applications (incl. PIM and sync)		■				△			Organize private moments easily
Provide additional services (e.g. location services)	■				△				Not wanted
Provide visualization (display)				■			△		High quality for video experience
Provide usage and standby time			■				△		High talk & standby time (300/300), video usage
Interaction with other devices		■				△			Standard desktop PC communication
Store data			■				△		200 pictures in medium quality
Consumer personalization/ operator customization		■					△		Main operator UI supported

Possible risks

- Basic organizer functionality possibly not sufficient for the emotional connection user, who uses the mobile phone as a tool to organize his / her daily life

Enthusiasm Model: Data input

According to the identified Window of Opportunity for Nestor the EM-categories have to be determined for operators and end-users

Required air interface: [X] GSM [X] GPRS [ ] EDGE [ ] UMTS [ ] WLAN/ UMA [ ] other: "…"

Preferred form factor: [X] Bar [ ] Slider [ ] Clam [ ] New/ others: "… e.g. swivel-clam"

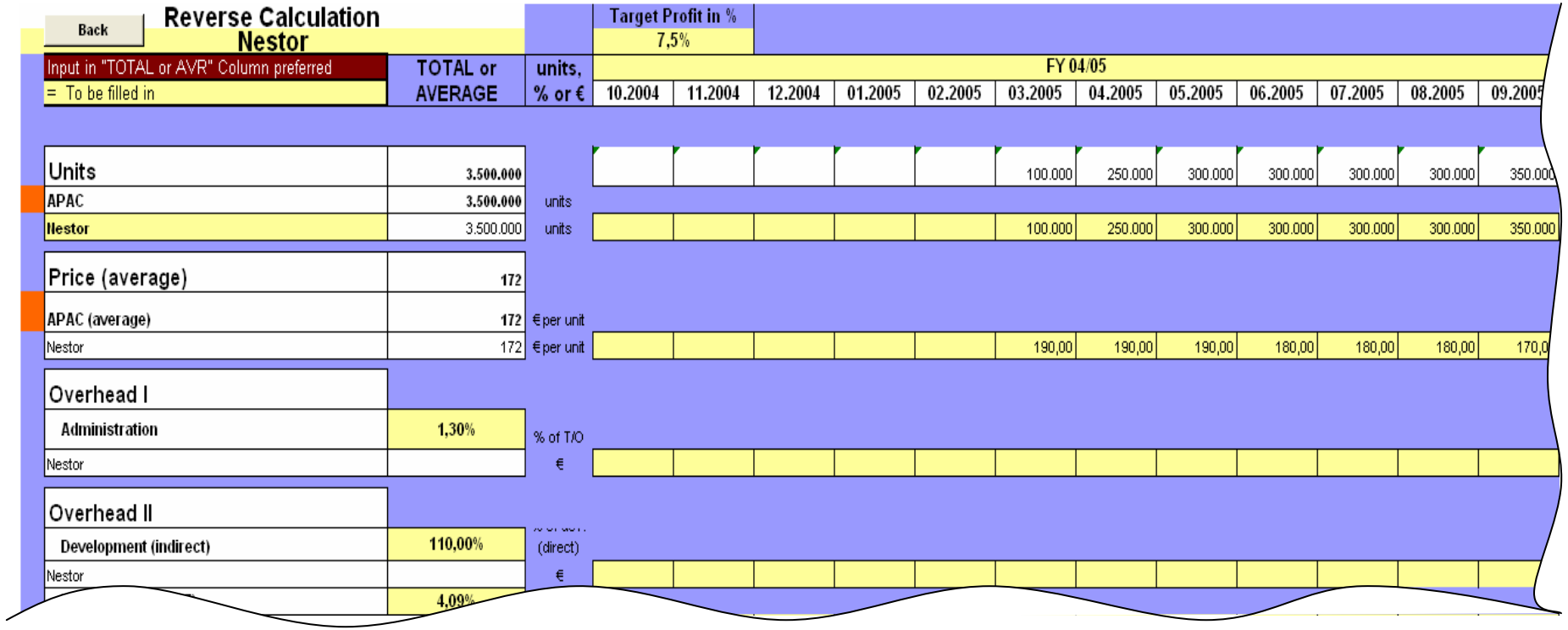
	End-user requirements	Operator requirements
Suggest/ provide…	**EM-Category (No/B/P/E)**	**Operator specs** (No/B/P/E on top level; in detail pls. set "-" for possible incompliance, "0" for compliance, "+" for over performance")
Make and receive calls (quality of basic function)	B	B
Appeal to user (design/ material/ form factor)	P	P
Support imaging and video	E	E
Support music and audio	P	P
Provide gaming	B	B
Provide outdoor/ leisure features (e.g. sensors)	NO	NO
Enable messaging	P	B
Support business applications (incl. PIM and sync)	B	B
Provide additional services (e.g. location services)	NO	NO
Usage and standby time	P	P
Provide visualization (display)	E	P
Interaction with other devices	B	B
Store data	P	P
Consumer personalization / operator customization	B	P

Agenda

- Window of Opportunity and Enthusiasm Model
- **Reverse Calculation**
- Product Target Splitting
- Alternatives Generation
- Alternatives Evaluation
- Target Controlling

Reverse Calculation: Data input

Nestor's Business Case data has to be entered into the input sheet of the Reverse Calculation tool



Back

Reverse Calculation
Nestor

Input in "TOTAL or AVR" Column preferred = To be filled in	TOTAL or AVERAGE	units, % or €	Target Profit in % 7,5%	FY 04/05 10.2004	11.2004	12.2004	01.2005	02.2005	03.2005	04.2005	05.2005	06.2005	07.2005	08.2005	09.2005
Units	3.500.000								100.000	250.000	300.000	300.000	300.000	300.000	350.000
APAC	3.500.000	units													
Nestor	3.500.000	units							100.000	250.000	300.000	300.000	300.000	300.000	350.000
Price (average)	172														
APAC (average)	172	€ per unit													
Nestor	172	€ per unit							190,00	190,00	190,00	180,00	180,00	180,00	170,0
Overhead I															
Administration	1,30%	% of T/O													
Nestor		€													
Overhead II															
Development (indirect)	110,00%	(direct)													
Nestor		€													
	4,09%														

All **financial Target Costing input parameters** for Nestor are to be entered into the yellow cells above (these parameters comprise e.g. **Target Sales Volume, Target Price and Target Profit** as well as the dedicated Business Case data)

Reverse Calculation: Calculation of Target BOM

The Target BOM of 98,97 € for Nestor, which is required as input for Product Target Splitting is automatically calculated by the IT-tool

	Lifecycle Total
Units	3.500.000
Target Turnover	603.000.000
Price (average)	172,29
Target Profit Total	45.225.000
Allowable Costs	557.775.000
Overhead I	7.839.000
Administration	7.839.000
Overhead II	83.376.500
Development (indirect)	7.700.000
Marketing (Pull + SF)	24.662.700
Selling Expense	28.160.100
SCM Costs	16.642.800
Other COGS	6.210.900
Directly Influenceable Costs (DIC)	466.559.500
Product Related Costs (PRC)	30.870.000
Development (direct)	7.000.000
Marketing (Push + HQ)	8.575.000
Service Costs	15.295.000
Manufacturing Costs	435.689.500
Manufacturing Costs per unit	124,48
Target BOM per unit	98,97
Variant Adder per unit	4,95
CC per unit	15,84
Licences per unit	4,73
Target Cost Gap	0
Target Cost Gap per unit	0,00
EBIT (for comparison purpose)	45.225.000
EBIT in % of T/O	7,50%

- In order to give a first assessment of the allowable BOM costs for Nestor, the Reverse Calculation offers the possibility to deduce a Target BOM.
- This Target BOM is calculated using the targeted sales volume and price as well as overhead percentages which are based on experiences with historic products
- Nestor‘s Target BOM is used as input for Product Target Splitting (market view) II in order to calculate Target Cost corridors for Nestor‘s main modules

Reverse Calculation: Data output

The positive Target Cost Gap of 4,13 EUR is identified for the Nestor. In addition the sensitivity of the Target Cost Gap is analyzed for standard scenarios

Back

Reverse Calculation
- Standard Simulations -

Re-Calculate Sheet

	Base Case Nestor	TCG = 0	EBIT = 0	Hist. ASP 165 €	TTM delay 1 month	Volume -10%	Volume +10%	Volume -30%	Volume +30%
	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total
Units	3.500.000	3.500.000	3.500.000	3.500.000	3.200.000	3.150.000	3.850.000	2.450.000	4.550.000
Target Turnover	603.000.000	584.642.848	533.745.328	577.500.000	546.000.000	542.700.000	663.300.000	422.100.000	783.900.000
Price (average)	172,29	167,04	152,50	165,00	170,63	172,29	172,29	172,29	172,29
Target Profit Total 7,5%	45.225.000	43.848.214	40.030.900	43.312.500	40.950.000	40.702.500	49.747.500	31.657.500	58.792.500
Allowable Costs	557.775.000	540.794.634	493.714.428	534.187.500	505.050.000	501.997.500	613.552.500	390.442.500	725.107.500
Overhead I	7.839.000	7.600.357	6.938.689	7.507.500	7.098.000	7.055.100	8.622.900	5.487.300	10.190.700
Administration	7.839.000	7.600.357	6.938.689	7.507.500	7.098.000	7.055.100	8.622.900	5.487.300	10.190.700
Overhead II	83.376.500	81.072.677	74.685.039	80.176.250	76.223.000	75.808.850	90.944.150	60.673.550	106.079.450
Development (indirect)	7.700.000	7.700.000	7.700.000	7.700.000	7.700.000	7.700.000	7.700.000	7.700.000	7.700.000
Marketing (Pull + SF)	24.662.700	23.911.892	21.830.184	23.619.750	22.331.400	22.196.430	27.128.970	17.263.890	32.061.510
Selling Expense	28.160.100	27.302.821	24.925.907	26.969.250	25.498.200	25.344.090	30.976.110	19.712.070	36.608.130
SCM Costs	16.642.800	16.136.143	14.731.371	15.939.000	15.069.600	14.978.520	18.307.080	11.649.960	21.635.640
Other COGS	6.210.900	6.021.821	5.497.577	5.948.250	5.623.800	5.589.810	6.831.990	4.347.630	8.074.170
Directly Influenceable Costs (DIC)	466.559.500	452.121.600	412.090.700	446.503.750	421.729.000	419.133.550	513.985.450	324.281.650	608.837.350
Product Related Costs (PRC)	30.870.000	30.870.000	30.870.000	30.870.000	28.824.000	28.483.000	33.257.000	23.709.000	38.031.000
Development (direct)	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000
Marketing (Push + HQ)	8.575.000	8.575.000	8.575.000	8.575.000	7.840.000	7.717.500	9.432.500	6.002.500	11.147.500
Service Costs	15.295.000	15.295.000	15.295.000	15.295.000	13.984.000	13.765.500	16.824.500	10.706.500	19.883.500
Manufacturing Costs	421.251.600	421.251.600	421.251.600	421.251.600	385.144.320	379.126.440	463.376.760	294.876.120	547.627.080
Manufacturing Costs per unit	120,36	120,36	120,36	120,36	120,36	120,36	120,36	120,36	120,36
BOM per unit	95,56	95,56	95,56	95,56	95,56	95,56	95,56	95,56	95,56
Variant Adder per unit	4,78	4,78	4,78	4,78	4,78	4,78	4,78	4,78	4,78
CC per unit	15,29	15,29	15,29	15,29	15,29	15,29	15,29	15,29	15,29
Licences per unit	4,73	4,73	4,73	4,73	4,73	4,73	4,73	4,73	4,73
Target Cost Gap	14.437.900	0	-40.030.900	-5.617.850	7.760.680	11.524.110	17.351.690	5.696.530	23.179.270
Target Cost Gap per unit	4,13	0,00	-11,44	-1,61	2,43	3,66	4,51	2,33	5,09
EBIT (for comparison purpose)	59.662.900	43.848.214	0	37.694.650	48.710.680	52.226.610	67.099.190	37.354.030	81.971.770
EBIT in % of T/O	9,89%	7,50%	0,00%	6,53%	8,92%	9,62%	10,12%	8,85%	10,46%

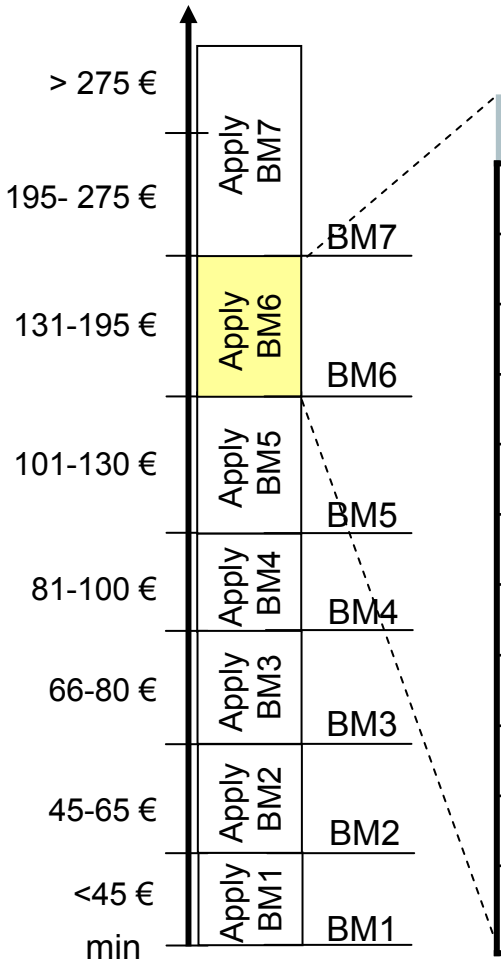
Agenda

- Window of Opportunity and Enthusiasm Model
- Reverse Calculation
- **Product Target Splitting**
- Alternatives Generation
- Alternatives Evaluation
- Target Controlling

Product Target Splitting: Selection and description of Basic Model

As Nestor is launched at 190€ the corresponding Basic Model 6 (which covers the price range of 131 - 195 €) is used

CRP = Customer Realized Price



Description of Basic Model 6

Component	Cost
Core architecture	18,60€
Sensors	0,00€
Connectivity	3,20€
Camera	4,42€
Display	16,45€
Memory	4,88€
Housing & acoustics	8,27€
Battery	1,97€
Delivery unit	1,93€
Total Costs	**59,72€**

Main Characteristics:

- Triband GPRS
- Bar phone painted surface Housing not exchangeable
- 65k color TFT display 120x160
- Java games integrated, downloadable
- VGA camera
- Battery 700mAh
- IrDA, Bluetooth, USB

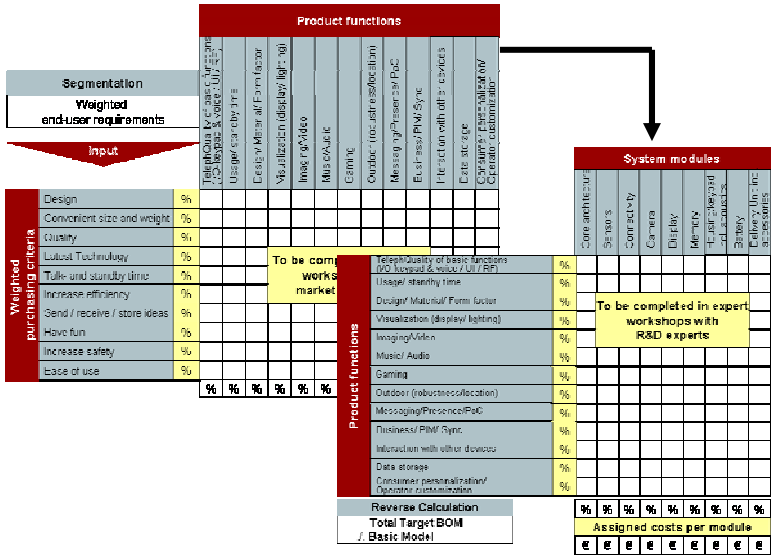
SIEMENS

Product Target Splitting (market view) for Nestor

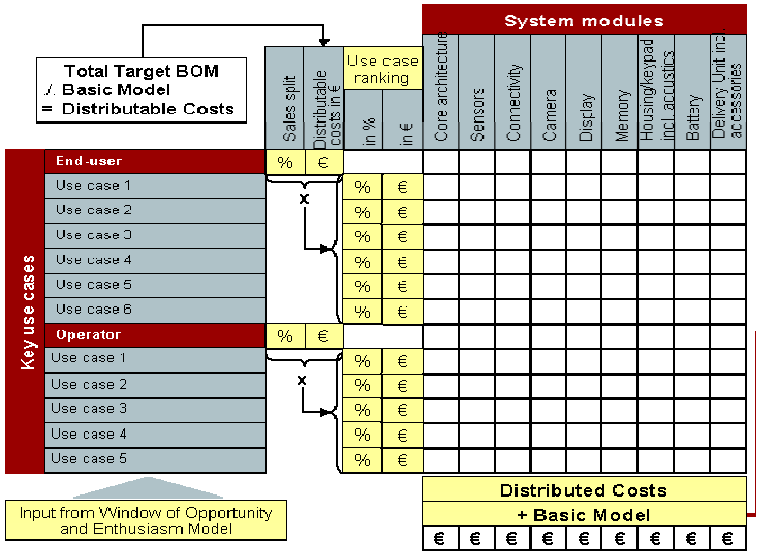
Two alternatives have been identified to derive Target Costs for Nestor's product modules

Product Target Splitting market view for Nestor

Traditional two step approach for Nestor



Adapted use case approach for Nestor



Product Target Splitting: Traditional market view step 1 for end-users

Based on the weighted purchasing criteria of Nestor's target group the relative importance of functional requirements is calculated for Nestor's end-users

		please fill in	Functional requirements									
	All points below refer to the additional desire to improve the defined basic bar phone for this target group	Final weighting [%]	Make and receive calls (quality of basic function)	Appeal to user (design/ material/ form factor)	Support imaging and video	Support music and audio	Provide gaming	Provide outdoor/ leisure features (e.g. sensors)	Enable messaging	Support business applications (incl. PIM and sync)	Provide additional services (e.g. location services)	Sum
Design	touch & feel, first visual appearance, form factor	18,00%		50,00%	15,00%	35,00%						100,00%
Convenient size and weight	size & weight	8,00%	10,00%	60,00%	30,00%							100,00%
Quality	all quality related issues (display, housing, feel)	9,00%		50,00%	25,00%	25,00%						100,00%
State of the art technology, latest features	latest available / upcoming features / technologies, positioning, sensors, latest display	3,00%			100,00%							100,00%
Talk- and standby & usage time	additional battery life	12,00%	25,00%		50,00%	25,00%						100,00%
Increase efficiency in daily private / professional life	enhanced PIM / PDA functions plus connectivity, speed of data transfer	10,00%								100,00%		100,00%
Send / receive / store ideas, memories and emotions	take better photos & videos, enhanced MMS, extra storage memory	18,00%			25,00%				75,00%			100,00%
Fun & entertainment feartures	games, music, radio & TV	8,00%					100,00%					100,00%
Increase my / my family's safety	emergency calls, locate & call family members, reduce SAR (radiation)	4,00%	100,00%									100,00%
Easy to use	Usability of keypad & menu, size & quality of icons & display	10,00%	15,00%		20,00%	15,00%			50,00%			100,00%
Relative Importance [%] end-user		100%	9,30%	18,30%	22,85%	13,05%	8,00%	0,00%	18,50%	10,00%	0,00%	100,0%

Product Target Splitting: Traditional market view step 1 for operator

For operators the relative importance of functional requirements (in addition to the selected Basic Model) is filled in directly

Product Target Splitting I
Operator requirements from Sales point of view

Enthusiasm Model: Functional Requirements and relevant Details [1:1 in PTS]	Requirem. importance in % (from sales)	Comment
Make and receive calls (quality of basic function)	9,00%	
Appeal to user (design/ material/ form factor)	20,00%	
Support imaging and video	25,00%	
Support music and audio	17,00%	
Provide gaming	9,00%	
Provide outdoor/ leisure features (e.g. sensors)	0,00%	
Enable messaging	10,00%	
Support business applications (incl. PIM and sync)	10,00%	
Provide additional services (e.g. location services)	0,00%	
Sum Check	100,00%	

In case an explanation is required the team has the possibility to enter it directly into the tool

Product Target Splitting: Traditional market view step 1 reconciled

After filling in the expected sales split, reconciled weightings for the product functions are determined

to be filled out	90 Operator	Sales split	10 End-user

Nestor	Operator requirements			Reconciled		End-user requirements	
Enthusiasm Model: Functional Requirements and relevant Details [1:1 in PTS]	(No/B/P/E) from EM	Requirem. importance in % (from sales)	Requirement importance in % RECONCILED	Requirem. importance in %	Requirement importance in % RECONCILED	Requirem. importance in % (from PTS I)	(No/B/P/E) from EM
	Vodafone SBD (coporate channel)	--				XY	--
				%			
Make and receive calls (quality of basic function)	B	9,00%	8,10%	9,03%	0,93%	9,30%	B
Appeal to user (design/ material/ form factor)	P	20,00%	18,00%	19,83%	1,83%	18,30%	P
Support imaging and video	E	25,00%	22,50%	24,79%	2,29%	22,85%	E
Support music and audio	P	17,00%	15,30%	16,61%	1,31%	13,05%	P
Provide gaming	B	9,00%	8,10%	8,90%	0,80%	8,00%	B
Provide outdoor/ leisure features (e.g. sensors)	NO	0,00%	0,00%	0,00%	0,00%	0,00%	NO
Enable messaging	B	10,00%	9,00%	10,85%	1,85%	18,50%	P
Support business applications (incl. PIM and sync)	B	10,00%	9,00%	10,00%	1,00%	10,00%	B
Provide additional services (e.g. location services)	NO	0,00%	0,00%	0,00%	0,00%	0,00%	NO
	Sum Check	100,00%	90,00%	100,00%	10,00%	100,00%	

Product Target Splitting: Traditional market view II

The information on product functions is translated into the relative importance of Nestor's modules

Product Target Splitting (market view II)

to be filled out	Weighting	Modules: Basic needed parts (BSF, PCB, B-components)	Sensors & others	Connectivity	Camera	Display	Memory	Housing, keypad, accoustics	Battery	Delivery unit	Sum
Make and receive calls (quality of basic function)	9,0%	20,00%		10,00%			20,00%	40,00%		10,00%	100,00%
Appeal to user (design/ material/ form factor)	19,8%	20,00%		10,00%	20,00%	20,00%		30,00%			100,00%
Support imaging and video	24,8%	20,00%		10,00%	25,00%	25,00%	20,00%				100,00%
Support music and audio	16,6%	5,00%					45,00%	45,00%		5,00%	100,00%
Provide gaming	8,9%	25,00%		10,00%		40,00%	15,00%	10,00%			100,00%
Provide outdoor/ leisure features (e.g. sensors)	0,0%										ok
Enable messaging	10,9%			30,00%	20,00%	20,00%	10,00%	20,00%			100,00%
Support business applications (incl. PIM and sync)	10,0%	20,00%		35,00%		25,00%	10,00%	10,00%			100,00%
Provide additional services (e.g. location services)	0,0%										ok

Total		Target Costs for modules									SUM
Relative importance from PTS II	%	15,78%	0,00%	13,01%	12,33%	18,39%	17,66%	21,09%	0,00%	1,73%	100,00%

Product Target Splitting: Traditional market view results

Target Costs are determined for Nestor's modules, through applying the relative importance of the functions on the distributable costs

Cost-Module Matrix Nestor

		Basic needed parts (BSF, PCB, B-components)	Sensors & others	Connectivity	Camera	Display	Memory	Housing, keypad, accoustics	Battery	Delivery unit
Relative Importance from PTS II		**15,8%**	**0,0%**	**13,0%**	**12,3%**	**18,4%**	**17,7%**	**21,1%**	**0,0%**	**1,7%**
Target BOM from RC	**98,97 €**									
Basic Model	**59,72 €**	**18,60 €**	**0,00 €**	**3,20 €**	**4,42 €**	**16,45 €**	**4,88 €**	**8,27 €**	**1,97 €**	**1,93 €**
Results from PTS	39,25 €	6,20 €	0,00 €	5,11 €	4,84 €	7,22 €	6,93 €	8,28 €	0,00 €	0,68 €
Target Costs per module	**98,97 €**	**24,80 €**	**0,00 €**	**8,31 €**	**9,26 €**	**23,67 €**	**11,81 €**	**16,55 €**	**1,97 €**	**2,61 €**
		25%	0%	8%	9%	24%	12%	17%	2%	3%
Target Cost Range (min.)		**22,54 €**	**0,00 €**	**7,25 €**	**8,11 €**	**21,47 €**	**10,41 €**	**14,77 €**	**1,69 €**	**2,24 €**
Target Cost Range (max.)		**27,05 €**	**0,00 €**	**9,36 €**	**10,41 €**	**25,87 €**	**13,21 €**	**18,33 €**	**2,25 €**	**2,98 €**

Product Target Splitting: Market View use case approach

Target Costs for product modules are determined for Nestor by translating use cases into a relative importance weighting of product modules

Target Cost defnition with use cases

to be filled out

Input from Window of Opportunity and Enthusiasm Model

		Total	Modules									
		Product in total	Basic needed parts (BSF, PCB, B-components)	Sensors & others	Connectivity	Camera	Display	Memory	Housing, keypad, accoustics	Battery	Delivery unit	Sum
		Sum	1.	2.	3.	4.	5.	6.	7.	8.	9.	
	Target BOM	99,0 €										
	BM	59,7 €										
	Headroom	39,3 €										
		EU/ MNO Ranking		Use case Ranking								
		in %	in €	in %		in €						
Key use cases	End user	10%	3,9 €									
	Use case 1: Take snapshots in darkness			10%		0,4 €				100%						100,00%
	Use case 2: Download video clips			30%		1,2 €	50%					30%	20%			100,00%
	Use case 3: Enjoy video streaming			50%		2,0 €	50%				50%					100,00%
	Use case 4: Show phone to other people			10%		0,4 €							100%			100,00%
	Operator	90%	35 €													
	Use case 1: Take snapshots in darkness			13%		4,6 €				100%						100,00%
	Use case 2: Download video clips			38%		13,4 €	25%		18%			30%	27%			100,00%
	Use case 3: Enjoy video streaming			38%		13,4 €	10%		20%		45%	17%	8%			100,00%
	Use case 4: Personalize the phone			11%		3,9 €			5%				77%		18%	100,00%
							15,97%	0,00%	13,49%	12,70%	17,89%	16,97%	21,19%	0,00%	1,78%	100,00%

Product Target Splitting: Results of the Market View use case approach

Target Costs are determined for Nestor's modules, through applying the relative importance of the modules on the distributable costs

Results from PTS

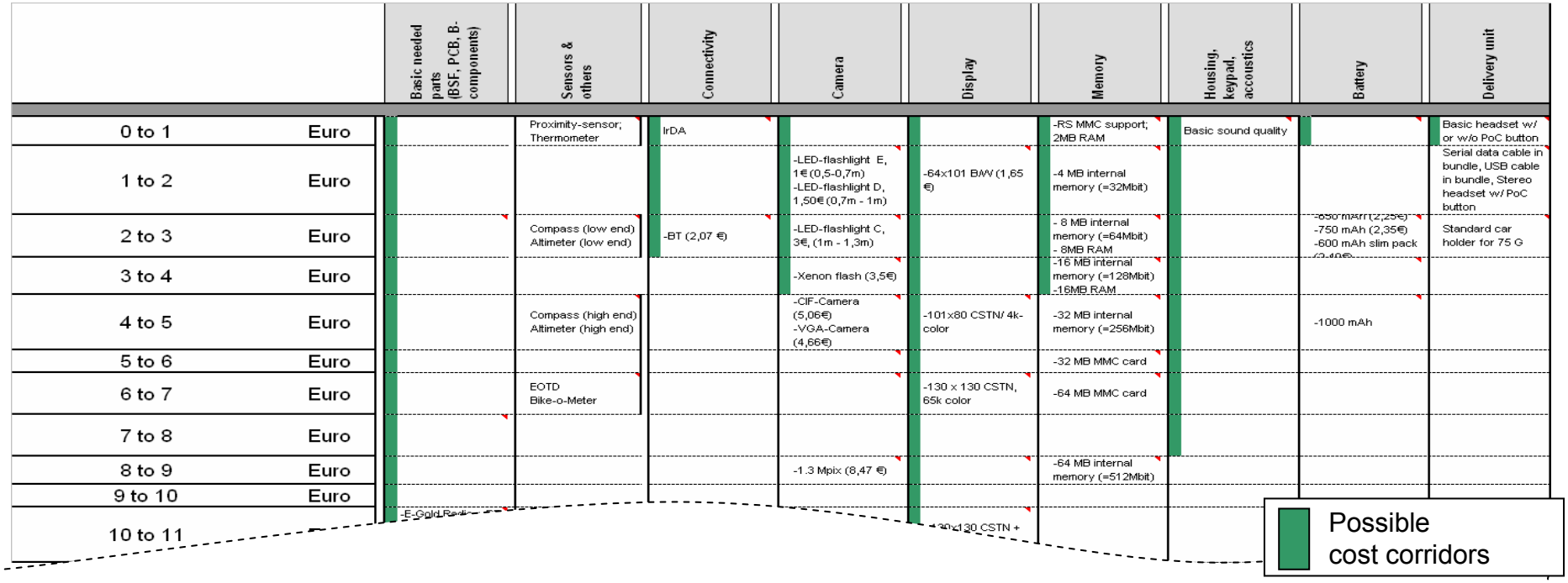
		Basic needed parts (BSF, PCB, B-components)	Sensors & others	Connectivity	Camera	Display	Memory	Housing, keypad, accoustics	Battery	Delivery unit
Relative Importance from PTS II		16,0%	0,0%	13,5%	12,7%	17,9%	17,0%	21,2%	0,0%	1,8%
Target BOM from RC	98,97 €									
Basic Model (BM3)	59,72 €	18,60 €	0,00 €	3,20 €	4,42 €	16,45 €	4,88 €	8,27 €	1,97 €	1,93 €
Results from PTS	39,25 €	6,27 €	0,00 €	5,30 €	4,98 €	7,02 €	6,66 €	8,32 €	0,00 €	0,70 €
Target Costs per module	98,97 €	24,87 €	0,00 €	8,50 €	9,40 €	23,47 €	11,54 €	16,59 €	1,97 €	2,63 €
		25%	0%	9%	10%	24%	12%	17%	2%	3%
Target Cost Range (min.)		22,61 €	0,00 €	7,42 €	8,24 €	21,28 €	10,17 €	14,81 €	1,69 €	2,26 €
Target Cost Range (max.)		27,12 €	0,00 €	9,57 €	10,57 €	25,66 €	12,91 €	18,37 €	2,25 €	3,00 €

Agenda

- Window of Opportunity and Enthusiasm Model
- Reverse Calculation
- Product Target Splitting
- **Alternatives Generation**
- Alternatives Evaluation
- Target Controlling

Alternatives Generation: Filtered Cost-Module Matrix

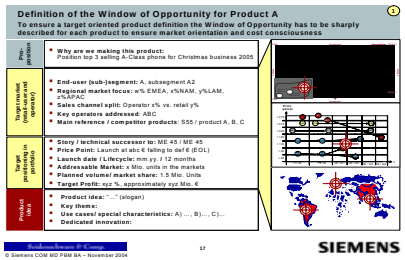
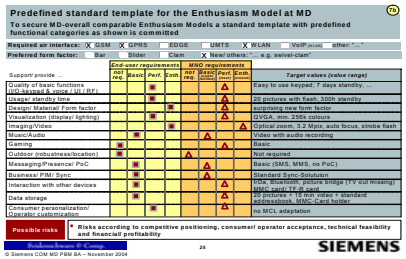
Based on the derived Target Cost corridors for modules the possible range of alternatives is identified and presented in a Cost-Module Matrix

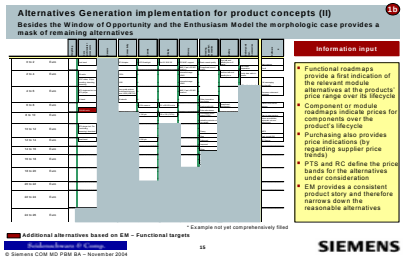


The Cost-Module Matrix provides a **clear overview** of the modules and the contained components. The components are vertically sorted by price. The **green bars mark the maximum allowable spending per module** based on the determined Target Costs for Nestor and thus, which feature alternatives are feasible from a cost point of view.

Alternatives Generation: Framework for the Alternatives Generation

All necessary framework information is supplied in a standard template to set clear guidelines for the following alternatives definition process for Nestor

Setting of framework		Definition of precise objectives
Window of Opportunity		▪ CX-class phone for Easter business 2005 ▪ Launch below 200€ falling to 140€ at end of life ▪ 100% EMEA target, sales split 90% operator/ 10% end user ▪ Video and imaging story
Enthusiasm Model		▪ Enthusiasm functionalities video and imaging have to be kept ▪ No outdoor or additional functionalities wanted ▪ All performance requirements should be part of the Alternatives Generation

Cost-Module Matrix		▪ Based on the Product Target Splitting results the main focus of the Alternatives Generation should lie with:
		  ▪ Display
		  ▪ Memory

"Knock-out criteria"		▪ No auto focus possible

Alternatives Generation: Functional Results

The possible alternatives of the Morphologic Case are narrowed down with respect to the market situation and the objectives defined in the Enthusiasm Model

Product functions support/ provide ...	Nestor Base Case	Nestor Design Phone	Nestor Connector Phone	Nestor Camera Phone
Make and receive calls (Quality of basic function – I/O/ UI/ RF)	Tri band / high talk & standby time			
Appeal to user (Design/ Material / Form factor)	classic & elegant metal housing	Thinnest (17mm) metal housing & leather/ rubber		Thicker housing than base case (21 mm)
Imaging and video	VGA camera, no Flash, 2x digital zoom			1.3 Mpix camera with 3x optical zoom
Music and audio	Common music files supported	MP3 ringtones supported	Surround sound speaker system	
Gaming	Provide gaming			
Outdoor and leisure features (e.g. sensors)	Not wanted			
Enable messaging	Enable messaging			
Business applications (incl. PIM and Sync)	Standard organizer functionality			
Additional services (e.g. location services)	Not wanted			
Visualization (Display)	176x220, TFT 2,1', 256k	132x176, TFT, 1,8', 265k	176x220, TFT 2,1', 256k	176x220, TFT 2,1', 256k
Usage- and standby time	300 h (Li-Ion 750 mAh)			400 h (Li-ion 900 mAh)
Interaction with devices	Slim Lumberg, IrDa	New Lumberg solution		
Store data	32MB, MMC slot		MMC card 32MB bundled	MMC card 32MB bundled
Consumer personalization/ Operator customization	Main operator UI supported			clubbers wristband

Responsibles for Alternatives Evaluation

Strategic and Portfolio fit	Financial fit	Competitiveness Operators	Competitiveness End-Users	Technical Feasibility	Resource fit	Time to Market fit

Alternatives Generation: Financial results

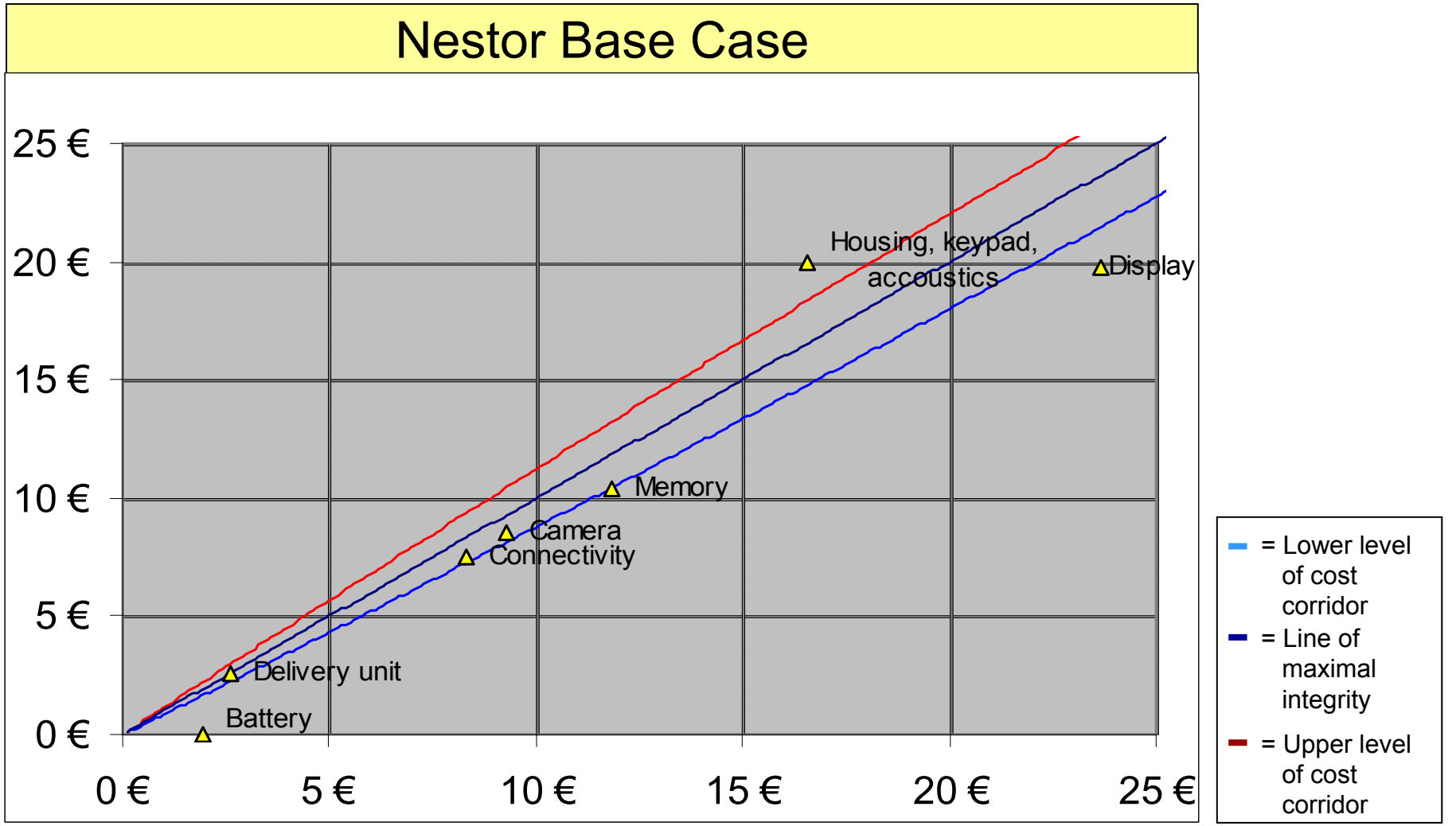
A financial comparison of actual and Target BOM guarantee a cost conscious Alternatives Generation

		Nestor Base Case	Nestor Design Phone			Nestor Connector Phone		
Modules	Target BOM	projected BOM (direct entry)	Δ to Base Case	projected BOM (calculation from Δ Base Case)	projected BOM (direct entry)	Δ to Base Case	projected BOM (calculation from Δ Base Case)	projected BC (direct entry)
Basic needed parts (BSF, PCB, B-components)	24,80 €	25,56 €	1,00 €	26,56 €		1,00 €	26,56 €	
Sensors & others	0,00 €	0,00 €	1,00 €	1,00 €		1,00 €	1,00 €	
Connectivity	8,31 €	7,56 €	1,00 €	8,56 €		1,00 €	8,56 €	
Camera	9,26 €	8,53 €	1,00 €	9,53 €		1,00 €	9,53 €	
Display	23,67 €	19,72 €	1,00 €	20,72 €		1,00 €	20,72 €	
Memory	11,81 €	10,40 €	1,00 €	11,40 €		1,00 €	11,40 €	
Housing, keypad, accoustics	16,55 €	19,99 €	1,00 €	20,99 €		1,00 €	20,99 €	
Battery	1,97 €	1,20 €	1,00 €	2,20 €		1,00 €	2,20 €	
Delivery unit	2,61 €	2,60 €	1,00 €	3,60 €		1,00 €	3,60 €	
Sum	98,97 €	95,56 €	9,00 €	104,56 €	0,00 €	9,00 €	104,56 €	0,00 €
		= Actual BOM		= Actual BOM			= Actual BOM	

A BOM calculation is directly conducted upon describing the alternatives. Thus the BOM costs of the generated alternatives can immediately be compared to the Target BOM.

Alternatives Generation: Congruence of Base Case to Target Cost corridors

After the alternatives have been generated, their module cost structure has to be mapped into the determined Target Cost corridors



SIEMENS

Agenda

- Window of Opportunity and Enthusiasm Model
- Reverse Calculation
- Product Target Splitting
- Alternatives Generation
- **Alternatives Evaluation**
- Target Controlling

Alternatives Evaluation: Main Criteria

A set of dedicated evaluation criteria is used for Nestor to evaluate the relative preference each of the four generated alternatives

	Criteria
1	Financial fit
2	Strategic portfolio fit
3	Market requirements' fit
4	Resource feasibility fit
5	Technical solutions' fit
6	Time To Market fit

Alternatives Evaluation: Main criteria and respective sub-criteria

To conduct the evaluation of Nestor's alternatives every single relevant sub-criterion has to be evaluated for every singe alternative

Alternatives Evaluation for Product Concepts

to be filled in

contains wrong value

SIEMENS

Seidenschwarz & Comp.
MANAGEMENT CONSULTING

	Criteria	Weight	Nestor Base Case	Nestor Design Phone	Nestor Connector Phone	Nestor Camera Phone
1	**Financial fit**					
	Overall score / weight	**24%**	**3,2**	**2,6**	**2,0**	**3,0**
1.1	Target Cost Gap per unit (% deviation of average)	100%	4	3	2	3
-- = 1	TCG < 0 and |TCG| > Target Profit		Target profit 45,2 Mio Eur; TCG 14,4 Mio Eur = 40%	Target profit 45,2 Mio Eur; TCG 87.900 Eur = 40%	Target profit 45,2 Mio Eur; TCG -17,1 Mio Eur = 40%	Target profit 45,2 Mio Eur; TCG 14,4 Mio Eur = 40%
- = 2	TCG < 0 and |TCG| b/w 30%-80% of Target Profit					
+ = 3	TCG < 0 and |TCG| > 80% of Target Profit					
++ = 4	TCG ± 0 or TCG > 0					
1.2	Target volume achievement (from WoO)	70%	2	2	2	3
-- = 1	volume not achievable		high volume pressure through missing enthusiasm feature: -7%	some volume pressure through portfolio canabilization: -3%	high volume pressure through low enthusiasm feature: -5%	no volume pressure: + 5,5%
- = 2	volume at risk					
+ = 3	volume achievable					
++ = 4	volume exceeded					
2	**Strategic portfolio fit**					
	Overall score / weight	**14%**	**2,5**	**1,8**	**2,5**	**2,5**
21.	Fit to selected price point (from WoO)	100%	4	4	4	4
-- = 1	more than 10% off		CX price point is at the upper mid class range of operators of 100-200 EUR	CX price point is at the upper mid class range of operators of 100-200 EUR	CX price point is at the upper mid class range of operators of 100-200 EUR	CX price point is at the upper mid class range of operators of 100-200 EUR
- = 2	up to ±5% off					
+ = 3	up to ±5% off					
++ = 4	exact fit					
2.2	Fit of product story/theme to segment (from WoO)	100%	3	2	3	2
-- = 1	contradicts target group		product targets subsegment emotional connection, but as many features are insert, other target groups could be addressed	product targets subsegment emotional connection, but as many features are insert, other target groups could be partially	product targets subsegment emotional connection, but as many features are insert, other target groups could be partially	product targets subsegment emotional connection, but as many features are insert, other target groups could be partially addressed
- = 2	fit not better than for any other group					
+ = 3	good fit					
++ = 4	[illegible]					
	[illegible] continuity		1			

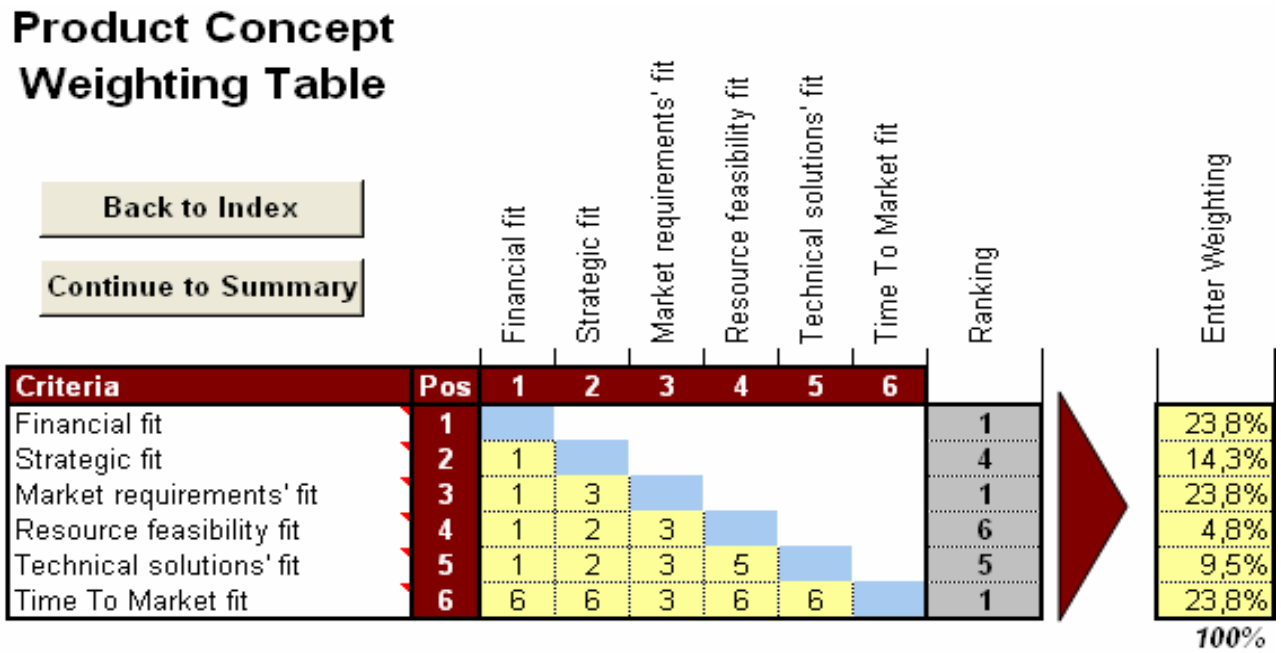
Alternatives Evaluation: Financial evaluation of alternatives

The evaluation of the criterion Financial Fit is supported by a dedicated calculation by the Reverse Calculation tool

Reverse Calculation - Alternatives Evaluation -	Nestor Base Case	Nestor Design Phone	Nestor Connector Phone	Nestor Camera Phone
	Lifecycle Total	Lifecycle Total	Lifecycle Total	Lifecycle Total
Units	**3.500.000**	**3.500.000**	**3.500.000**	**3.500.000**
Target Turnover	**603.000.000**	**603.000.000**	**603.000.000**	**603.000.000**
Price (average)	**172,29**	**172,29**	**172,29**	**172,29**
Target Profit Total	**45.225.000**	**45.225.000**	**45.225.000**	**45.225.000**
Allowable Costs	**557.775.000**	**557.775.000**	**557.775.000**	**557.775.000**
Overhead I	**7.839.000**	**7.839.000**	**7.839.000**	**7.839.000**
Administration	7.839.000	7.839.000	7.839.000	7.839.000
Overhead II	**83.376.500**	**82.276.500**	**83.376.500**	**84.476.500**
Development (indirect)	7.700.000	6.600.000	7.700.000	8.800.000
Marketing (indirect)	24.662.700	24.662.700	24.662.700	24.662.700
Selling Expense	28.160.100	28.160.100	28.160.100	28.160.100
SCM Costs	16.642.800	16.642.800	16.642.800	16.642.800
Other COGS	6.210.900	6.210.900	6.210.900	6.210.900
Directly Influenceable Costs (DIC)	**466.559.500**	**467.659.500**	**466.559.500**	**465.459.500**
Product Related Costs (PRC)	**30.870.000**	**29.870.000**	**30.870.000**	**31.870.000**
Development (direct)	7.000.000	6.000.000	7.000.000	8.000.000
Marketing (direct)	8.575.000	8.575.000	8.575.000	8.575.000
Service Costs	15.295.000	15.295.000	15.295.000	15.295.000
Manufacturing Costs	**421.251.600**	**437.701.600**	**452.751.600**	**437.001.600**
Manufacturing Costs per unit	**120,36**	**125,06**	**129,36**	**124,86**
BOM per unit	95,56	100,26	103,56	100,06
Variant Adder per unit	4,78	4,78	4,78	4,78
CC per unit	15,29	15,29	15,29	15,29
Licences per unit	4,73	4,73	5,73	4,73
Target Cost Gap	**14.437.900**	**87.900**	**-17.062.100**	**-3.412.100**
Target Cost Gap per unit	**4,13**	**0,03**	**-4,87**	**-0,97**
EBIT (for comparison purpose)	**59.662.900**	**45.312.900**	**28.162.900**	**41.812.900**

Alternatives Evaluation: Pair-wise comparison of criteria

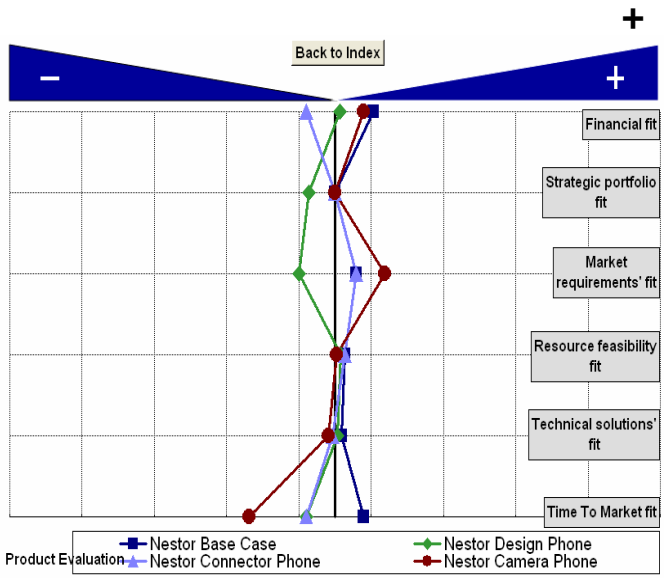
The importance of the six main criteria can be determined before the alternatives can be evaluated in a scoring model



Alternatives Evaluation: Results I

The alternative "Nestor Camera" is superior to all other alternatives

Criteria	Weighting	Nestor Base Case	Nestor Design Phone	Nestor Connector Phone	Nestor Camera Phone
Financial fit	24%	+	-	-	+
Strategic portfolio fit	14%	+	-	+	+
Market requirements' fit	24%	+	-	+	++
Resource feasibility fit	5%	++	+	++	+
Technical solutions' fit	10%	+	+	-	-
Time To Market fit	24%	+	-	+	+
Sum	100%	2,67	2,18	2,51	2,72
Ranking		2	4	3	1



Strengths/ Opportunities

- With the **1,3 Mpix camera** (optical zoom), the product provides a **clear Enthusiasm Feature** for the price category below 200 EUR.
- The camera **enhances the video story even more**.
- **Better re-use possibilities** for future generations / other products

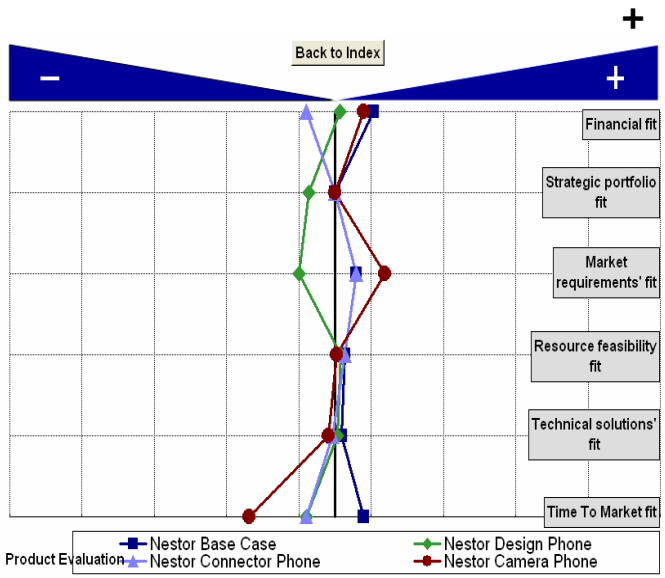
Weaknesses/ Threats

- **Less profitable** than Nestor Base Case.
- The **1,3 Mpix camera** (optical zoom) was **only used in the pre-development**, but well known supplier offers same standards like already used cameras.

Alternatives Evaluation: Results II

The alternative "Nestor Base Case" shows an inferior performance than the "Nestor Camera Phone"

Criteria	Weighting	Nestor Base Case	Nestor Design Phone	Nestor Connector Phone	Nestor Camera Phone
Financial fit	24%	+	-	-	+
Strategic portfolio fit	14%	+	-	+	+
Market requirements' fit	24%	+	-	+	++
Resource feasibility fit	5%	++	+	++	+
Technical solutions' fit	10%	+	+	-	-
Time To Market fit	24%	+	-	+	+
Sum	100%	2,67	2,18	2,51	2,72
Ranking		2	4	3	1



Strengths/ Opportunities

- The product **mainly uses components already used in the production** and thus reduces development and quality risks.
- Availability of **all components secured due to existing contracts** with suppliers.

Weaknesses/ Threats

- The **standard video functionality / camera limits the potential for differentiation** and risks to offer a "me too" product and thus expose it to high price pressure in the Christmas period.

Management summary for Alternatives Evaluation III

The “Camera Phone“ is recommended

Sum	100%	2,67	2,18	2,51	2,72
Ranking		2	4	3	1

Product functions	Camera Phone
Make and receive calls (Quality of basic function – I/O/ UI/ RF)	Tri band / high talk & standby time
Appeal to user (Design/ Material / Form factor)	Thicker housing than base case (21 mm)
Support imaging and video	1.3 Mpix camera with 3x optical zoom
Suppoprt music and audio	As base case
Provide gaming	Standard Gaming
Provide outdoor and leisure features (e.g. sensors)	As base case
Enable messaging	As base case
Provide business applications (incl. PIM and Sync)	As base case
Provide additional services (e.g. location services)	As base case
Provide visualization (Display)	176x220, TFT 2,1', 256k
Provide usage-/standby time	400 h (Li-ion 900 mAh)
Interaction with devices	As base case
Store data	MMC card 32MB bundled
Consumer personalization/ Operator customization	clubbers wristband

Description of the recommended alternative

- The “Camera Phone” follows the idea of a classical CX phone that addresses a mass market, but with a focus on more technically oriented users who prefer to have a high end camera included.
- It succeeds the predecessor “Cerberus” and additionally creates customer enthusiasm by enlarging the multi-media functionalities with a higher camera resolution and enlarged video functions.

Reasoning

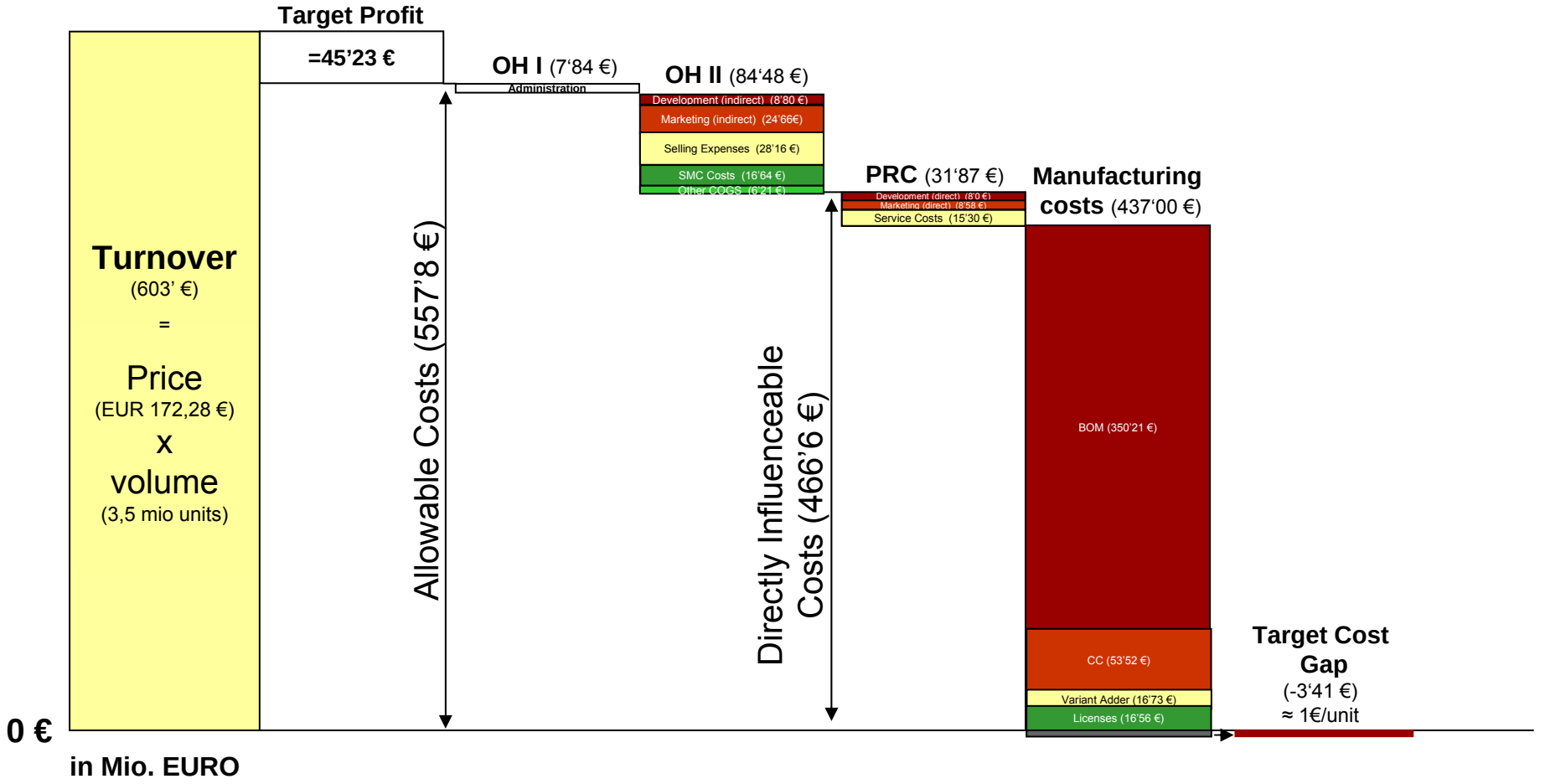
- The 1,3 Mpix camera (optical zoom) offers a clear USP in the targeted price segment and thus allows additional market differentiation and reduces the price pressure risk.
- Camera and video functionalities complement each other very well.
- The technical risk due to the new camera should be minimized by increasing the development budget for the camera integration.
- The “Nestor Camera Phone” still has a Target Cost Gap of -1 EUR that should be closed by cost management measures.

Risk

- The standard video functionality / camera limits the potential for differentiation and risks to offer a “me too” product and thus expose it to high price pressure in the Christmas period.

Measures to close the Target Cost Gap

In order to close the Target Cost Gap selected measures have to be taken by the product definition team



In order to close the Target Cost Gap, the product definition team has to initiate **cost savings in the cost categories Product Related Costs and Manufacturing Costs.**

Agenda

- Window of Opportunity and Enthusiasm Model
- Reverse Calculation
- Product Target Splitting
- Alternatives Generation
- Alternatives Evaluation
- **Target Controlling**

Target Controlling: The Enthusiasm Model as controlling tool

In order to evaluate the degree of fulfillment between the targeted functional profile and the current phone concept, the Enthusiasm Model is used as controlling tool for Nestor

Target Controlling - Enthusiasm Model fulfillment

Please fill in | 1=Target not reached | 3=Target

Functions	Operator require-ments	End-user require-ments	Mbeta	Malpha	M0	Comment	
Make and receive calls (quality of basic function)	B	B					
Appeal to user (design/ material/ form factor)	P	P					
Support imaging and video	E	E					
Support music and audio	P	P					
Provide gaming	B	B					
Provide outdoor/ leisure features (e.g. sensors)	NO	NO					
Enable messaging	B	P				PoC becomes market standard	
Support business applications (incl. PIM and sync)	B	B					
Provide additional services (e.g. location services)	NO	NO					
Usage and standby time	P	P				Improved battery performance added as new battery introduced by T-Program (no size impact)	
Provide visualization (display)	E	P					
Interaction with other devices	B	B					
Store data	P	P					
Consumer personalization / operator customization	P	B					

Target Controlling: The Reverse Calculation as controlling tool (data input)

In order to document and control changes in the Reverse Calculation a dedicated controlling sheet is provided in the IT-tool

2 Target Controlling RC Nestor

Add actual status	Mbeta	Malpha	M0			S0	M1	M3
	Lifecycle Total	Lifecycle Total	Lifecycle Total	Deviation to Mbeta	Description deviations	Lifecycle Total	Lifecycle Total	Lifecycle Total
Units	3.500.000,00	3.500.000						
Target Turnover	603.000.000	603.000.000						
Price (average)	172,29	172,29	1					
Target Profit Total	45.225.000	45.225.000						
Allowable Costs	557.775.000	557.775.000						
Overhead I	7.839.000	7.839.000						
Administration	7.839.000	7.839.000						
Overhead II	84.476.500	84.476.500						
Development (indirect)	8.800.000	8.800.000						
Marketing (Pull + SF)	24.662.700	24.662.700						
Selling Expense	28.160.100	28.160.100						
SCM Costs	16.642.800	16.642.800						
Other COGS	6.210.900	6.210.900						
Directly Influenceable Costs (DIC)	465.459.500	465.459.500						
Product Related Costs (PRC)	31.870.000	31.870.000						
Development (direct)	8.000.000	8.000.000						
Marketing (Push + HQ)	8.575.000	8.575.000						
Service Costs	15.295.000	15.295.000						
Manufacturing Costs	437.010.000	445.165.000						
Manufacturing Costs per unit	124,86	127,19						
BOM per unit	100,06	102,14						
Variant Adder per unit	4,78	4,78						
CC per unit	15,29	15,29						
Licences per unit	4,73	4,98						
Target Cost Gap	-3.420.500	-11.575.500	0	3.420.500		0	0	0
Target Cost Gap per unit	-0,98	-3,31						
EBIT (for comparison purpose)	41.804.500	33.649.500	0	-41.804.500		0	0	0
EBIT in % of T/O	6,93%	5,58%	0,00%			0,00%	0,00%	0,00%

To add the **updated business case data** for the defined milestones, mark the **unit cell** under the **corresponding milestone (1)** and then press the **„Add actual status“ button (2).**

Target Controlling: The Reverse Calculation as controlling tool (results)

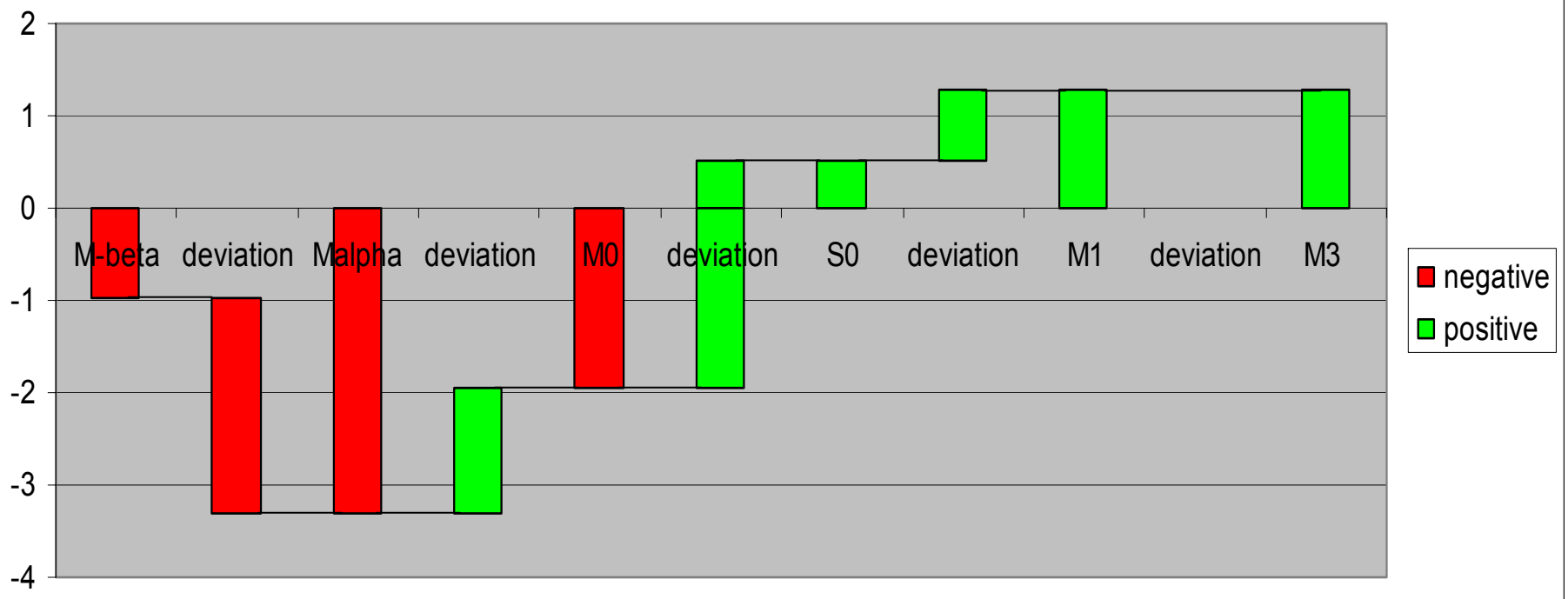
The IT-tool does not only calculate deviations from the original Business Case but also requires additional explanations in case any deviations occur

Target Controlling RC Nestor	Mbeta	Malpha	M0			S0	M1	M3
	Lifecycle Total	Lifecycle Total	Lifecycle Total	Deviation to Mbeta	Description deviations	Lifecycle Total	Lifecycle Total	Lifecycle Total
Units	**3.500.000,00**	**3.500.000**	**3.500.000**	0		**3.500.000**	**3.500.000**	**3.500.000**
Target Turnover	**603.000.000**	**603.000.000**	**603.000.000**	0		**603.000.000**	**603.000.000**	**603.000.000**
Price (average)	**172,29**	**172,29**	**172,29**	0,00		**172,29**	**172,29**	**172,29**
Target Profit Total	**45.225.000**	**45.225.000**	**45.225.000**	0		**45.225.000**	**45.225.000**	**45.225.000**
Allowable Costs	**557.775.000**	**557.775.000**	**557.775.000**	0		**557.775.000**	**557.775.000**	**557.775.000**
Overhead I	**7.839.000**	**7.839.000**	**7.839.000**	0		**7.839.000**	**7.839.000**	**7.839.000**
Administration	7.839.000	7.839.000	7.839.000	0		7.839.000	7.839.000	7.839.000
Overhead II	**84.476.500**	**84.476.500**	**84.520.500**	44.000		**84.548.000**	**84.548.000**	**84.548.000**
Development (indirect)	8.800.000	8.800.000	8.844.000	44.000	Changes in direct R&D	8.871.500	8.871.500	8.871.500
Marketing (Pull + SF)	24.662.700	24.662.700	24.662.700	0		24.662.700	24.662.700	24.662.700
Selling Expense	28.160.100	28.160.100	28.160.100	0		28.160.100	28.160.100	28.160.100
SCM Costs	16.642.800	16.642.800	16.642.800	0		16.642.800	16.642.800	16.642.800
Other COGS	6.210.900	6.210.900	6.210.900	0		6.210.900	6.210.900	6.210.900
Directly Influenceable Costs (DIC)	**465.459.500**	**465.459.500**	**465.415.500**	-44.000		**465.388.000**	**465.388.000**	**465.388.000**
Product Related Costs (PRC)	**31.870.000**	**31.870.000**	**31.443.000**	-427.000		**31.113.000**	**31.113.000**	**31.113.000**
Development (direct)	8.000.000	8.000.000	8.040.000	40.000	40.000 EUR extra expenditure to enable JAVA gaming	8.065.000	8.065.000	8.065.000
Marketing (Push + HQ)	8.575.000	8.575.000	8.108.000	-467.000	467.000 EUR less marketing push expenditure because of joint campaign with operator	8.108.000	8.108.000	8.108.000
Service Costs	15.295.000	15.295.000	15.295.000	0		14.940.000	14.940.000	14.940.000
Manufacturing Costs	**437.010.000**	**445.165.000**	**440.755.000**	3.745.000		**432.460.000**	**429.765.000**	**429.765.000**
Manufacturing Costs per unit	**124,86**	**127,19**	**125,93**	1,07		**123,56**	**122,79**	**122,79**
BOM per unit	100,06	102,14	100,88	0,82	Bigger battery and price decline in chipset	100,31	99,44	99,44
Variant Adder per unit	4,78	4,78	4,78	0,00		4,78	4,78	4,78
CC per unit	15,29	15,29	15,29	0,00		13,74	13,74	13,74
Licences per unit	4,73	4,98	4,98	0,25		4,73	4,83	4,83
Target Cost Gap	**-3.420.500**	**-11.575.500**	**-6.782.500**	-3.362.000		**1.815.000**	**4.510.000**	**4.510.000**
Target Cost Gap per unit	**-0,98**	**-3,31**	**-1,94**	**-0,96**		**0,52**	**1,29**	**1,29**
EBIT (for comparison purpose)	**41.804.500**	**33.649.500**	**38.442.500**	-3.362.000		**47.040.000**	**49.735.000**	**49.735.000**
EBIT in % of T/O	**6,93%**	**5,58%**	**6,38%**			**7,80%**	**8,25%**	**8,25%**

Target Controlling: Development of the Target Cost Gap

A dedicated Graphic provides an easy to understand overview about the development of the Target Cost Gap

Development of the total TCG over time



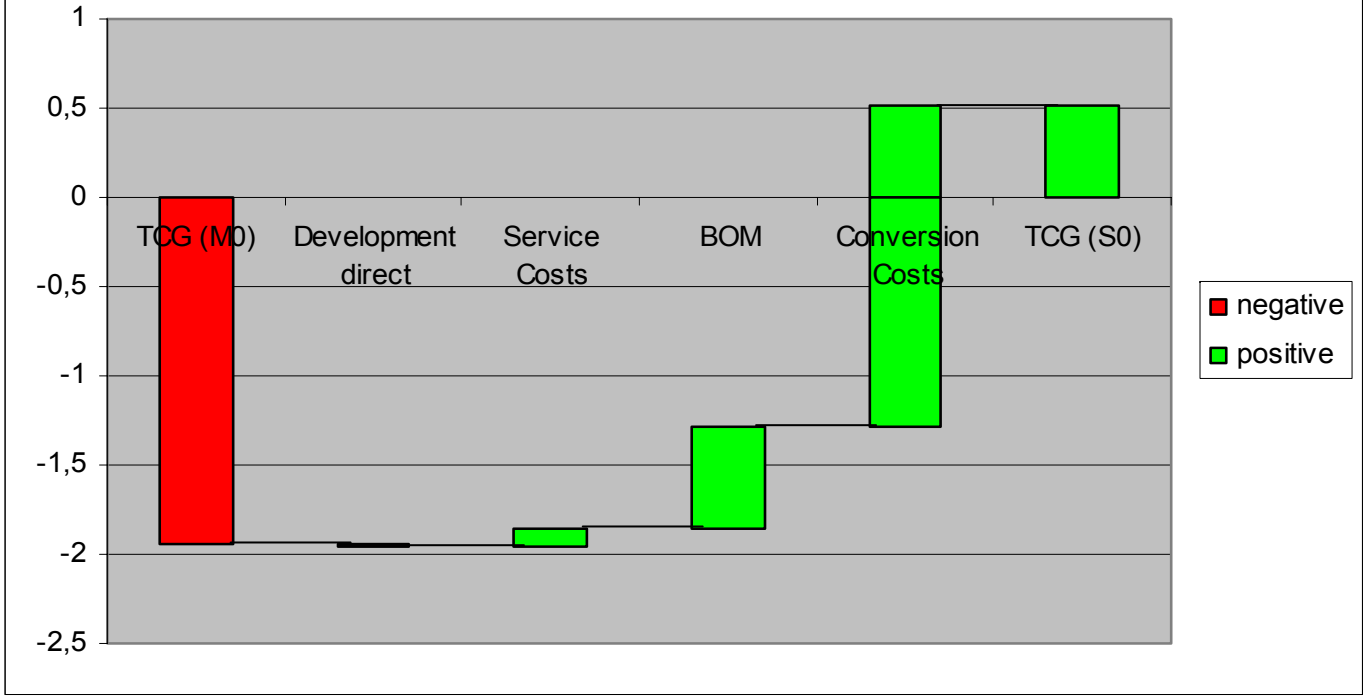
Explanation

- The team should give a detailed reasoning for changes in the Target Cost Gap over time.

Target Controlling: Detailed changes in the Target Cost Gap per unit

A dedicated Graphic provides an easy to understand overview about the individual deviations in the Target Cost Gap per unit between the milestones

Development of Target Cost Gap per unit between M0 and S0



Explanation

- BOM decrease through introduction of a new battery and a price decline in the core architecture of the phone
- Through optimization of the phone concept, the conversion costs could be minimized

Target Controlling: Development of core components

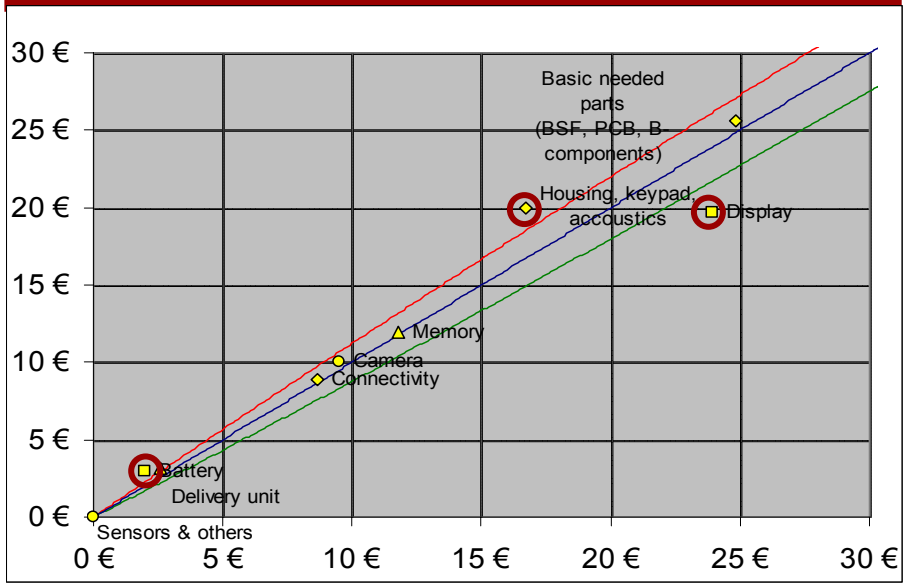
The IT-tool provides the product definition team with the possibility to crosscheck whether the actual BOM structure is in line with the cost corridors set by the market

		Please fill in !			Mbeta	Malpha	M0	S0	M1	M3
Modules	Target BOM	PTS II rel. importance	range min.	range max.	actual BOM	actual BOM	actual BOM	actual BOM	actual BOM	actual BOM
Basic needed parts (BSF, PCB, B-components)	24,80 €	15,78%	22,54 €	27,05 €	25,56 €	25,56 €	23,00 €	23,00 €	23,00 €	23,00 €
Sensors & others	0,00 €	0,00%	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €	0,00 €
Connectivity	8,31 €	13,01%	7,25 €	9,36 €	8,85 €	8,85 €	8,85 €	8,85 €	8,85 €	8,85 €
Camera	9,26 €	12,33%	8,11 €	10,41 €	10,00 €	10,00 €	10,00 €	10,00 €	9,84 €	9,84 €
Display	23,67 €	18,39%	21,47 €	25,87 €	19,72 €	19,72 €	19,72 €	19,72 €	19,72 €	19,72 €
Memory	11,81 €	17,66%	10,41 €	13,21 €	10,40 €	11,94 €	12,55 €	12,12 €	11,41 €	11,41 €
Housing, keypad, accoustics	16,55 €	21,09%	14,77 €	18,33 €	19,99 €	19,99 €	19,99 €	19,99 €	19,99 €	19,99 €
Battery	1,97 €	0,00%	1,69 €	2,25 €	2,92 €	2,92 €	3,61 €	3,47 €	3,47 €	6,47 €
Delivery unit	2,61 €	1,73%	2,24 €	2,98 €	3,16 €	3,16 €	3,16 €	3,16 €	3,16 €	3,16 €
Sum	98,97 €	100,00%	98,97 €		100,60 €	102,14 €	100,88 €	100,31 €	99,44 €	102,44 €
			Target BOM		= Actual BOM	= Actual BOM	= Actual BOM	= Actual BOM	= Actual BOM	= Actual BOM

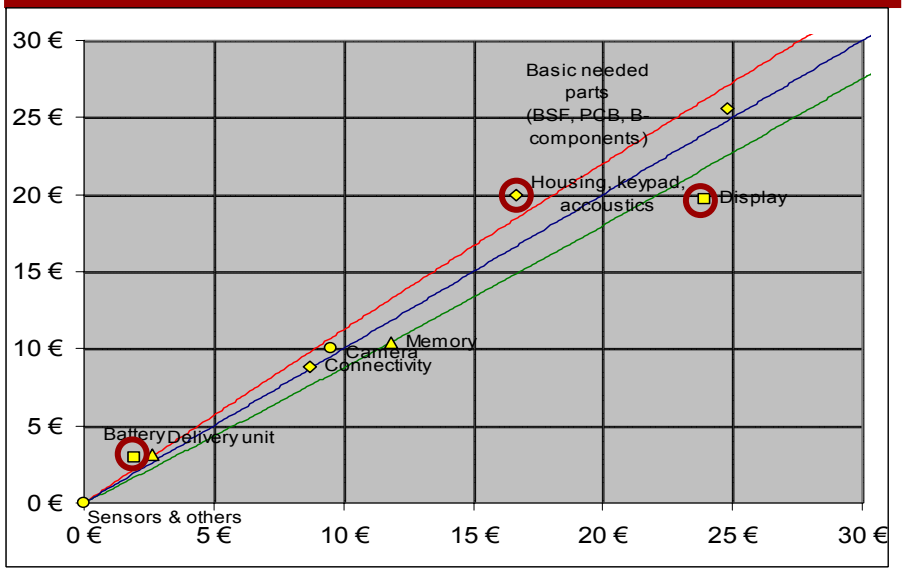
Target Controlling: Value Control Chart

In order to visualize the changes in the degree of compliance of the module structure of Nestor with the Target Cost corridors (shown for M1), a graphical evaluation is provided

S0



M1



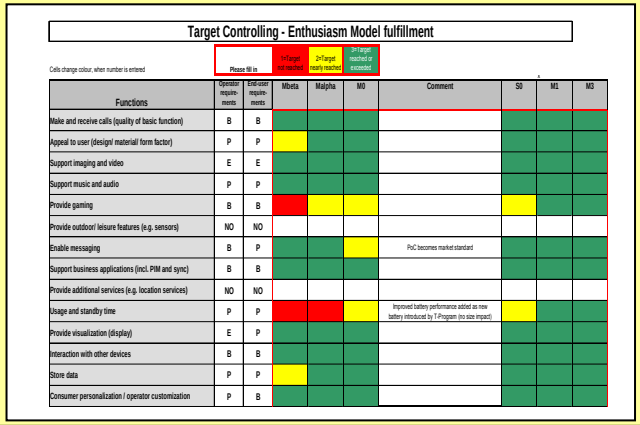
Explanation

- Due to an 8% decline in camera prices (corresponding to a price decrease of 0,25 EUR) the module camera now meets its market requirements.
- As display prices are still low for MD due to scale effects in procurement the value share of this module is still below market requirements, whereas the display specifications meet market demands

Target Controlling: The management cockpit per product

To facilitate the communication with the management, Nestor's key controlling implications (shown for M3) are aggregated into a management cockpit

Enthusiasm Model



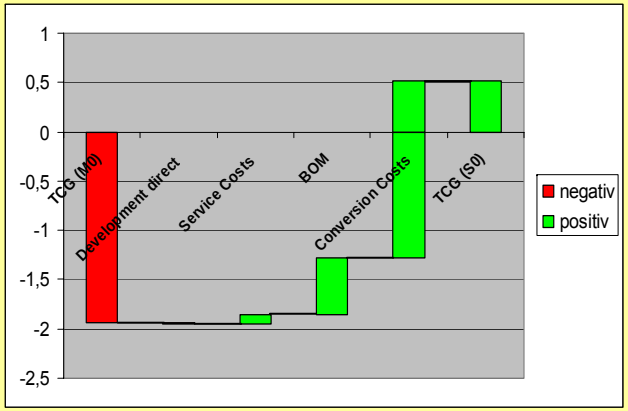
Target Controlling - Enthusiasm Model fulfillment

Cells change colour, when number is entered

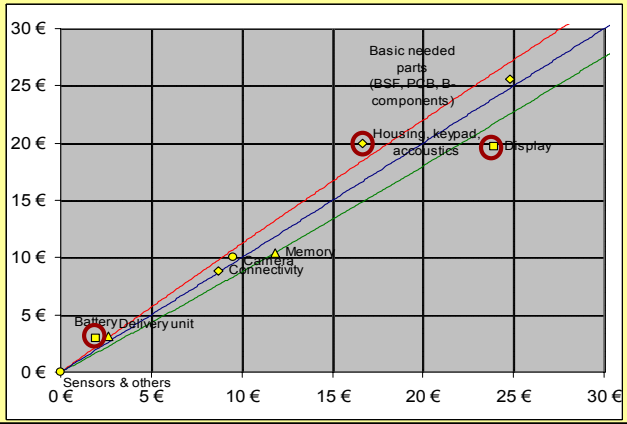
Please fill in | 1=Target not reached | 2=Target nearly reached | 3=Target reached or exceeded

Functions	Operator require-ments	End-user require-ments	Mbeta	Malpha	M0	Comment	S0	M1	M3
Make and receive calls (quality of basic function)	B	B							
Appeal to user (design/ material/ form factor)	P	P							
Support imaging and video	E	E							
Support music and audio	P	P							
Provide gaming	B	B							
Provide outdoor/ leisure features (e.g. sensors)	NO	NO							
Enable messaging	B	P				PoC becomes market standard			
Support business applications (incl. PIM and sync)	B	B							
Provide additional services (e.g. location services)	NO	NO							
Usage and standby time	P	P				Improved battery performance added as new battery introduced by TI Program (no size impact)			
Provide visualization (display)	E	P							
Interaction with other devices	B	B							
Store data	P	P							
Consumer personalization / operator customization	P	B							

Reverse Calculation



Value Control Chart



Comments / Change Requests

- For S0 the product concept meets its functional requirements
- All Enthusiasm Features are in line with the market environment
- No change requests since the last status report
- Design well accepted in design test