

# The New Age of Handset Customisation: 2006 - 2011

*New players, business models and market trends that are changing the economics and dynamics of delivering uniquely customised handsets*



**ARC CHART**

# **The New Age of Handset Customisation: 2006 - 2011**

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## Executive Summary

Handset customisation is a standard practice across the mobile industry. Mobile network operators (MNOs) enforce a range of modifications to manufacturer handsets to improve service interoperability and discovery. However, customisation is now working its way into the physical form factor of the device, as well as the graphical user interface. MNOs like Vodafone and Nordisk Mobiltelefon have launched completely customised phones to better address the needs of specific customer segments. New-age MVNOs such as AMP'd, ESPN and Voce, are deploying customised handsets to appeal to niche market segments. Handset manufacturers of all sizes and types are evolving their product portfolio towards differentiated devices that appeal to niche audiences. Finally, consumer and lifestyle brands such as ELLE and ESCADA, are diversifying into mobile handsets in search of brand extension opportunities and greater profits.

This report examines the industry evolving around uniquely customised handsets (UCHs). We believe that the coming years will see a proliferation of uniquely customised handsets, which have both distinguished industrial design and a customised user interface, to target niche consumer segments. This will meet an increased demand for variety and personalisation in phone colours, styles and form factors, as handset cosmetics become a key purchase criterion for consumers. Market precedents such as Vertu, Xelibri, ESCADA, Firefly, Vodafone Simply, Dmobo's Disney-themed M900, i-kids, ELLE Glamphone, Bang & Olufsen Serene, Goldvish, Casio G-Zone, Voce, Jitterbug and Nordisk MobilTelefon have paved the way for uniquely customised handsets, targeted at a wide range of segments, including kids, fashionable females, tweens, teenagers, sports enthusiasts, senior citizens and VIPs.

### **Manufacturers: striving for segmentation**

With the top six manufacturers seeing their profit margins shrink to 11% in 2005, OEMs of all sizes are increasingly turning to sophisticated handset customisation to appeal to niche customer segments. Motorola, Nokia, Sagem and LG have used superficial plastics re-finishing, often with a co-branding approach. Innovative Tier-2 and Tier-3 OEMs such as TCL Alcatel are spawning internal business units to deliver UCHs. ODMs such as HTC continue to facilitate handset customisation, while ODEs such as Cellon, TechFaith and FG Wireless, are improving the economics of producing differentiated handset designs for brands, MVNOs and MNOs.

We believe that Customised Design Manufacturers (CDMs) will be the primary route for the design and distribution of uniquely customised handsets to 2009. CDM is a term coined by ARCchart for the fabless manufacturer that brings together all the stages of the handset commercialisation process, without many of the fixed costs associated with an OEM. A CDM combines brand licensing with handset industrial design, outsourced manufacturing, quality control, distribution, reverse logistics retailing and can also include an after-sales, on-device service proposition integrated on the handset. i-mate, modelabs, Tedemis and TCL Alcatel (an OEM with an in-house CDM unit) are the first, defining examples of a customised design

manufacturer. We believe that within the next five years, CDMs will be a route to market that hundreds of brands, service providers, MVNOs and eventually MNOs will exploit.

### **Operators and MVNOs: Time for handset innovation**

With a one-size-fits-all brand and unclear brand deliverables, the benefits of operator handset customisation have yet to be rigorously proven. The MNO approach to handset customisation needs rejuvenation, and the report examines the more targeted approaches to customisation taken by MVNOs. Firefly, Helio, AMP'd, Disney, ESPN and Voce have pioneered an innovative value proposition: targeting niche customer segments, not only with appropriate content and services, but also with a uniquely customised device as a core part of the value proposition. Vodafone's Simply and the forthcoming Nordisk MobilTelefon rugged handset present exemplary operator forays into UCHs. We expect most Tier-1 operators to be launching uniquely customised handsets as an evolution of their product segmentation strategies in order to better retain customers and extract higher revenues from each segment.

### **Consumer brands: the new force in mobile handsets**

The report identifies consumer and lifestyle brands as an emerging force in the handset industry in the coming years. With falling barriers for entry into the handset market, brands are eyeing opportunities for brand extension and increased revenues in the 1 billion handset-a-year market. The case studies of ELLE, Airness, Elite Model and ESCADA show how a brand extension in the form of uniquely customised mobile phones can prove successful.

### **The new economics of handset customisation**

The barriers to handset commercialisation are falling. The report identifies twelve stages of commercialisation and discusses the new players that are arriving to integrate many of these segments: from brand licensing, industrial design and hardware design, to distribution, retailing and customer support. Beyond customised design manufacturers, we believe that another route to market is appearing for UCHs: value added distributors (VADs). Case studies of VADs such as Emporia Telecom, Dangaard Telecom and Brightpoint show how the logistics operations of many distributors will be expanding to offer not only superficial handset customisation, but also brand licensing and tailored services in search of increased profit margins.

The technology for end-to-end user interface customisation that has recently become available from vendors such as Digital Airways, e-SIM, MSX and TAT will substantially reduce the cost and time-to-market for delivering handsets with uniquely styled user experiences. Overall, the handset software will transform to configurable software stacks enabling both UI customisation as well as service development and deployment, while maintaining time-to-market to under 6 months.

### **Market Trends: 2006-2011**

ARCchart estimates that UCHs will account for less than 0.5% of the global handset market in 2006. However, this will grow aggressively over the next five years, facilitated by the rise of the customised design manufacturers, the extension of lifestyle brands towards mobile phones, and UCHs featuring more centrally within the MNO and MVNO strategy. These trends will force the Tier-1 OEMs to assign a growing proportion of their handset portfolios over to uniquely customised devices in order to stay competitive. By 2011, we estimate that 234 million uniquely customised handsets will ship, accounting for about 19% of the global market. Eventually, we believe handset customisation will become a mainstream activity that will be outsourced to handset system integrators, a new type of intermediary that will leverage economies of scale between operators and manufacturers.

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# Preface

REPORT ORGANISATION, COMPANIES REVIEWED AND INTERVIEWED

## | Organisation of the Report

This research report is structured around nine chapters:

### Chapter A: **The Quiet Revolution**

A flashback into the history of handset customisation and a fast forward into the proliferation of uniquely customised handsets

### Chapter B: **The Market Today**

The status of manufacturer, mobile operator and brand activities and the market for uniquely customised handsets

### Chapter C: **Manufacturers: Disruptive Times In the Age Of Micro-Segmentation**

Manufacturer strategies and case studies in handset customisation from skinning to total redesign

### Chapter D: **Operators & MVNOs: Time For Handset Innovation**

The ageing state of operator handset customisation and case studies of the novel MVNO approach to market segmentation through handset innovation

### Chapter E: **Consumer Brands: The New Force In Mobile Handsets**

Routes to market, incentives and challenges for brands entering the handset customisation market.

### Chapter F: **The Silk Road of Customised Handsets**

The arduous path of handset commercialisation, from brand licensing and industrial design to distribution and the retail experience

### Chapter G: **A Guide To Technologies For Handset Customisation**

The technology vendor ecosystem, from user interface and plastics customisation to operating systems and reference designs

**Chapter H: 2006-2011: Market Forecasts And Trends**

The growth of uniquely customised handsets and the trends that will shape the handset customisation market

**Chapter I: Recommendations for Industry Players**

Strategic insights for mobile operators, manufacturers and brands charting their course in handset customisation and segmentation

## | Companies and Products Reviewed

Over 45 companies and products related to device customisation are reviewed in this report, as listed below. The depth of each review varies according to the relevance of the company or product to device customisation, ranging from a brief overview of the company positioning, to extensive 3-page reviews of company background, positioning, products, customers, technology and strategy.

Adobe Flash Lite	Firefly	Openwave MIDAS
Amp'd Mobile	Frog design	Open Plug
Bang & Olufsen Serene	Helio	Purple Labs
Brightpoint	HTC	SavaJe
Cellon	Idem	SkinIt
Dangaard Telecom	Inclosia	SKY Mobile Media
Digital Airways	i-kids	Symbian
Disney Mobile	Microsoft	TAT
Dmobo M900	Mobile ESPN	Trolltech Qtopia
ELLE Glamphone	modelabs	UI Evolution
Emblaze Mobile	MSX	Vertu
Emporia Telecom	Nokia Content Discoverer	Xelibri
ESCADA	Nokia S60	Voce
e-SIM	Nordisk Mobiltelefon	Vodafone Ferrari
FG Wireless	Obigo	Vodafone Simply
Goldvish	Ocean Observations	

## | Methodology and interviews

Interviews with over 30 companies were conducted for this report – see list below. Primary research included analysing information collected from company publications, media coverage and details obtained through numerous discussions with industry insiders.

Bang and Olufsen	Idem	Sonopia
Brightpoint	Inclosia	Symbian
Cellon	Microsoft	TAT
Dangaard Telecom	modelabs	TCL Alcatel
Digital Airways	MSX	Tedemis
Emblaze Mobile	Nokia	Texas Instruments
e-SIM	Ocean Observations	T-Mobile
ESPN	Open Plug	UIEvolution
FG Wireless	Purple Labs	Virgin Mobile (US)
Firefly	SkinIt	
Geniem	SKY Mobile Media	

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