

# Mobile Gambling

## Casinos, Lotteries & Betting 2008-2013

- Fifth Edition -



# Table of Contents

**Glossary ..... 11**

## Executive Summary

---

**Introduction ..... 13**

**Types of Mobile Gambling ..... 13**

    Casino Style Gambling..... 14

    Lotteries ..... 14

    Sports Betting..... 14

    Betting Exchanges ..... 14

    The Market for Mobile Gambling Services..... 14

        Figure ES1: Total Wager (\$m) from Mobile Gambling Services. By 9 Key Regions 2007-2013 ..15

        Table ES1: Total Wager (\$m) from Mobile Gambling Services. By 9 Key Regions 2007-2013 ..... 15

        Figure ES2: Total Gross Win (\$m) from Mobile Gambling Services. By 9 Regions 2007-2013 ...16

        Table ES2: Total Gross Win (\$m) from Mobile Gambling Services. By 9 Regions 2007-2013 ..... 16

**The Hurdles to Mobile Gambling Adoption ..... 17**

    Table ES3: The Hurdles for Mobile Gambling ..... 17

## I. Cellular Market Growth

---

**I.1 Introduction ..... 19**

**I.2 Growth of the Cellular Market..... 19**

    I.2.1 Global Cellular Subscriber Market..... 19

        Figure I.1: Cellular Subscriber Growth (m) by 8 Key Regions 2006-2013 .....20

        Table I.1: Cellular Subscriber Growth (m) by 8 Regions 2006-2013.....20

        Figure I.2: Cellular Subscriber Base, Market Share (%) by 8 Key Regions 2006-2013 .....21

        Figure I.3: Cellular Subscribers Penetration (%) by 8 Key Regions 2006-2013 .....21

    I.2.2 Leading Mobile Operator Groups by Subscriber Base .....21

        Table I.2: Leading Mobile Operator Groups by Subscriber Base (m) Q1 2008 .....22

    I.2.3 Growth of 3G.....22

        Table I.3: Global Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....22

        Figure I.4: Global Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....23

**I.3 Regional Cellular Market Growth .....23**

    I.3.1 North America.....23

        i. Mobile Phone Penetration .....23

ii. US Market Structure .....	23
iii. 3G Adoption .....	23
Figure 1.5: North American Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	24
Table 1.4: North American Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	24
I.3.2 South America .....	24
i. Diverse Region .....	24
ii. Mobile Penetration Rates.....	24
iii. Dominant Technology.....	25
iv. Players in Region .....	25
v. 3G Deployments .....	25
Figure 1.6: South American Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	25
Table 1.5: South American Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	25
I.3.3 Western Europe.....	26
i. Mobile Penetration .....	26
Figure 1.7: Western Europe Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	26
ii. Market Structure.....	26
iii. 3G Penetration .....	27
Table 1.6: Western Europe Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	27
I.3.4 Eastern Europe .....	27
i. Mobile Penetration .....	27
Table 1.7: Eastern Europe Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	27
Figure 1.8: Eastern Europe Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	27
ii. 3G Penetration .....	28
I.3.5 Far East & China.....	28
i. Mobile Penetration .....	28
ii. 3G Services.....	28
Figure 1.9: Far East & China Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	29
Table 1.8: Far East & China Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	29
I.3.6 Indian Sub Continent.....	29
i. Mobile Penetration .....	29
Figure 1.10: Indian Sub Continent Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	30
ii. 3G Services.....	30
Table 1.9: Indian Sub Continent Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013.....	30
I.3.7 Rest of Asia Pacific .....	30
i. Mobile Penetration .....	30

Figure 1.11: Rest of Asia Pacific Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	31
ii. 3G Adoption.....	31
Table 1.10: Rest of Asia Pacific Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	31
<b>1.3.8 Africa &amp; Middle East.....</b>	<b>31</b>
i. Market Background.....	31
ii. Mobile Penetration.....	32
Figure 1.12: Africa & Middle East Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	32
iii. Players.....	32
iv. ARPU.....	32
Table 1.11: Africa & Middle East Cellular Subscriber Forecasts (m) by Technology (2G, 2.5G, 3G, 3.5G/3.9G) 2008-2013 .....	32
v. 3G Adoption.....	33
<b>1.4 The Opportunity for Mobile Entertainment.....</b>	<b>33</b>
Figure 1.13: Monthly Voice ARPU (\$), Selected Countries (France, Germany, Italy, Netherlands, Spain, UK, US), 2003-2007.....	34
<b>1.5 The Opportunity for Mobile Gambling Services .....</b>	<b>35</b>

## 2. The Mobile Gambling Market

---

<b>2.1 Introduction .....</b>	<b>37</b>
<b>2.2 The Dynamics of Mobile Gambling.....</b>	<b>37</b>
2.2.1 How People Gamble.....	37
2.2.2 Mobile Gambling Drivers .....	39
i. Convenience.....	39
ii. Large Consumer Base.....	39
iii. Ideal Target Market.....	40
iv. Privacy.....	40
v. Mobile Internet Adoption is Increasing.....	40
vi. Handset UIs Have Improved Dramatically.....	40
vii. Deregulation of Gambling Services (UK only) .....	40
viii. Operator Attitudes Have Changed .....	41
<b>2.3 Types of Games and Services .....</b>	<b>41</b>
2.3.1 Casino Style Gambling.....	42
Table 3.1: Traditional Casino Games Popular with Online Gamblers.....	42
2.3.2 Lotteries .....	42
2.3.3 Sports Betting.....	43
2.3.4 Betting Exchanges .....	43

## 3. Mobile Gambling: The Players

<b>3.1 Applications Providers .....</b>	<b>45</b>
3.1.1 Spin3.....	45
3.1.2 Probability.....	47
i. Company Background.....	47
ii. Products and Services .....	47
3.1.3 Win Gaming Media (WGM).....	48
i. Company Background.....	48
ii. Products and Services .....	49
Figure 3.1: WGM Architecture Overview .....	50
3.1.4 Mfuse.....	50
i. Company Background.....	50
ii. Products & Services.....	51
Figure 3.2: Mfuse NOVO platform.....	51
iii. Corporate Strategy.....	52
3.1.5 Collectivity .....	52
i. Company Background.....	52
ii. Products and Services .....	52
iii. Corporate Strategy.....	53
3.1.6 Chartwell Technology.....	53
i. Company Background.....	53
ii. Products and Services .....	54
3.1.7 Betfair .....	54
i. Company Background.....	54
ii. Products and Services .....	54
3.1.8 WinOne (EGET).....	55
i. Company Background.....	55
ii. Products and Services .....	55
3.1.9 Phantom Fiber.....	55
i. Company Background.....	55
ii. Products and Services .....	55
Figure 3.3: Phantom Fiber Advanced Wireless Platform .....	56
3.1.10 MobileAware.....	57
3.1.11 Playtech .....	57
i. Company Background.....	57
ii. Products and Services .....	58
3.1.12 Cecure Gaming.....	58
3.1.13 Managed Gaming Solutions.....	59
i. Company Background.....	59
ii. Products and Services .....	59
Figure 3.4: JetBet Gaming Platform .....	60
iii. Corporate Strategy.....	60

3.1.14 KK Games.....	62
i. Company Background .....	62
ii. Products and Services.....	62
a. kkbet.....	62
b. kkfootball.....	62
3.1.15 Openlot .....	63
Figure 3.5: Openlot Platform.....	63
<b>3.2 Service Providers.....</b>	<b>64</b>
3.2.1 Mobile Casinos.....	64
i. NetPlay .....	65
a. Company Background.....	65
b. Corporate Strategy.....	65
c. Products and Services.....	65
ii. Intertops.....	66
iii. Wild Jack Mobile Casino.....	66
3.2.2 Mobile Betting .....	67
3.2.3 Mobile Lotteries.....	67
i. UK: The National Lottery.....	69
ii. Lottomatica/GTECH.....	69
iii. Million 2-1 .....	70
a. Company Background.....	70
b. Products and Services .....	70

## 4. Telecom and Gambling Regulation

---

<b>4.1 Regulations .....</b>	<b>71</b>
4.1.1 Introduction.....	71
<b>4.2 Gambling Regulations .....</b>	<b>71</b>
4.2.1 Overview .....	71
4.2.2 US Regulation .....	72
i. The Wire Act 1961 .....	73
ii. Kyl Bill.....	73
iii. HR441 I and the SAFE Port Act.....	73
iv. Repercussions from HR 441 I .....	74
v. The People vs. Yahoo!.....	74
vi. The WTO Verdict.....	75
vii. Future Prospects.....	76
viii. AB 471 – The Nevada Bill.....	77
4.2.3 Canada .....	77
4.2.4 The UK Model – Legalisation and Regulation.....	78
i. The Gambling Act, 2005 .....	78
4.2.5 Europe.....	79

i. Pan European Legislation.....	80
4.2.6 Asia-Pacific .....	81
4.2.7 Latin America.....	83
4.2.8 Africa/Middle East.....	83
Table 5.1: Gambling in South Africa, Total Wager and Gross Win (\$m), 2006/7 .....	84
<b>4.3 Other Regulations – Mobile Content.....</b>	<b>84</b>
4.3.1 Self Regulation – The Operators’ Approach .....	84
i. Independent Mobile Classification Body (IMCB).....	85
ii. Internet Content Rating Association (ICRA).....	85
4.3.2 PhonepayPlus.....	86
4.3.3 OFCOM .....	87
4.3.4 CTIA .....	87
4.3.5 Pan-European Legislation.....	88
i. Directive 95/46/EC: Processing Personal Data and the Protection of Privacy .....	88
ii. The E-Commerce Sector Data Protection Directive (2002/58/EC).....	88
iii. The Distance Selling Directive (97/7/EC) .....	88
ii. The E-money Directive.....	88

## 5. Hurdles to Deployment and Adoption

---

<b>5.1 Trust .....</b>	<b>89</b>
<b>5.2 Processing of Payments .....</b>	<b>90</b>
Table 5.1: The Three Principles of PRSMS.....	91
5.2.1 Payforit .....	92
5.2.2 GPay.....	93
<b>5.3 The User Interface .....</b>	<b>93</b>
5.3.1 Difficulty in Discovering Services and Content .....	93
5.3.2 Difficulty In Accessing Services and Content.....	94
5.3.3 Difficulty in Navigating Services and Content.....	95
5.3.4 Difficulty in Utilising Multiple Applications Simultaneously .....	96
<b>5.4 Data Cost .....</b>	<b>96</b>
<b>5.5 Industry Structure .....</b>	<b>97</b>
<b>5.6 Network Coverage .....</b>	<b>97</b>
<b>5.7 Acceptance.....</b>	<b>98</b>
5.7.1 Problem Gambling.....	99
i. Gamcare.....	99
<b>5.8 Age Verification .....</b>	<b>99</b>

## 6. Forecasts

---

<b>6.1 Introduction .....</b>	<b>101</b>
-------------------------------	------------

<b>6.2 Mobile Casinos .....</b>	<b>102</b>
6.2.1 Mobile Phone Users Who Gamble Using Casino Type Services (Single User).....	102
Table 6.1: Percentage of Mobile Users Who Partake in Casino-type Gambling Services (Single-User). By Region 2006-2013. ....	103
Figure 6.1: Number of Mobile Users (m) Who Partake in Casino-type Gambling Services (Single-User). By Region 2007-2013. ....	103
Table 6.2: Number of Mobile Users (m) Who Partake in Casino-type Gambling Services (Single-User). By Region 2006-2013. ....	104
6.2.2 Mobile Casino Average Monthly Wager (Single User).....	104
Figure 6.2: Average Monthly Wager (\$) Per User, Mobile Casino Services (Single User). By Region 2007-2013.....	104
Table 6.3: Average Monthly Wager (\$) Per User, Mobile Casino Services (Single User). Regional Forecasts 2007-2013 .....	105
6.2.3 Total Mobile Casino Wagers (Single-User).....	105
Figure 6.2: Total Wagers (\$m), Mobile Casino Services (Single User). Regional By Region, 2007-2013. ....	105
Table 6.4: Total Wagers (\$m), Mobile Casino Services (Single User). By Region, 2007-2013. ....	106
6.2.4 Total Mobile Casino Gross Win (Single-User).....	106
Figure 6.3: Total Mobile Casino Gross Win (\$m) (Single-User). By Region 2007-2013 .....	106
Table 6.5: Total Mobile Casino Gross Win (\$m) (Single-User). By Region 2007-2013 .....	107
6.2.5 Mobile Phone Users Who Gamble Using Casino Type Services (Multi-User).....	107
Table 6.6: Percentage of Mobile Users Who Partake in Casino-type Gambling Services (Multi-User). By Region 2006-2013. ....	107
Figure 6.4: Number of Mobile Users (m) Who Partake in Casino-type Gambling Services (Multi-User). By Region 2007-2013. ....	108
Table 6.7: Number of Mobile Users (m) Who Partake in Casino-type Gambling Services (Multi-User). Regional Forecast 2007-2013. ....	108
6.2.6 Mobile Casino Average Monthly Wager (Multi User) .....	108
Figure 6.5: Average Monthly Wager (\$) Per User, Mobile Casino Services (Multi User). By Region 2007-2013.....	109
Table 6.8: Average Monthly Wager (\$) Per User, Mobile Casino Services (Multi User). By Region 2007-2013.....	109
6.2.7 Total Mobile Casino Wagers (Multi-User).....	109
Figure 6.6: Total Wagers (\$m), Mobile Casino Services (Multi User). By Region, 2007-2013. ....	110
Table 6.9: Total Wagers (\$m), Mobile Casino Services (Multi User). By Region, 2007-2013. ....	110
6.2.8 Total Mobile Casino Gross Win (Multi-User).....	110
Figure 6.7: Total Mobile Casino Gross Win (\$m) (Multi-User). By Region 2007-2013 .....	111
Table 6.10: Total Mobile Casino Gross Win (\$m) (Multi-User). By Region 2007-2013 .....	111
6.2.9 Total Mobile Casino Wagers (All Services) .....	111
Figure 6.8: Total Wagers (\$m), Mobile Casino Services (All Services). By Region, 2007-2013. ....	112
Table 6.11: Total Wagers (\$m), Mobile Casino Services (All Services). By Region, 2007-2013. ....	112
6.2.10 Total Mobile Casino Gross Win (All Services).....	112
Figure 6.9: Total Mobile Casino Gross Win (\$m) (All Users). By Region 2007-2013 .....	113
Table 6.12: Total Mobile Casino Gross Win (\$m) (All Users). By Region 2007-2013 .....	113

<b>6.3 Mobile Lotteries.....</b>	<b>113</b>
6.3.1 The Market for Mobile Lottery Participation.....	113
i. Users Who Buy Lottery Tickets via Their Mobile Phone.....	114
Table 6.13: Percentage of Mobile Phone Users Who Play Lottery Games via Their Mobile Phone. By Region 2006-2013.....	114
Figure 6.10: Mobile Users (m) Who Take Part in Lotteries via Their Mobile Phone –By Region 2007-2013.....	115
Table 6.14: Mobile Users (m) Who Take Part in Lotteries via Their Mobile Phone. By Region 2006-2013.....	115
6.3.2 Mobile Lottery Average Monthly Wager.....	115
Figure 6.11: Average Monthly Wager (\$) Per User, Mobile Lottery Services. By Region 2007-2013.....	116
Table 6.15: Average Monthly Wager (\$) Per User, Mobile Lottery Services. By Region 2007-2013.....	116
6.3.3 Total Mobile Lottery Wagers.....	117
Figure 6.12: Total Wagers (\$m), Mobile Lottery Services. By Region, 2007-2013.....	117
Table 6.16: Total Wagers (\$m), Mobile Lottery Services. By Region 2007-2013.....	117
6.3.4 Total Mobile Lottery Gross Win.....	118
Figure 6.13: Total Mobile Lottery Gross Win (\$m). By Region 2007-2013.....	118
Table 6.17: Total Mobile Lottery Gross Win (\$m). By Region 2007-2013.....	118
<b>6.4 Mobile Betting.....</b>	<b>119</b>
Table 6.18: Percentage of Mobile Phone Users Who Engage in Betting via Their Mobile Phone. By Region 2006-2013.....	119
Figure 6.14: Mobile Users (m) Who Place Bets via Their Mobile Phone. By Region 2007-2013.....	120
Table 6.19: Mobile Users (m) Who Place Bets via Their Mobile Phone. By Region 2006-2013.....	120
6.4.1 Mobile Betting Average Monthly Wager.....	120
Figure 6.15: Average Monthly Wager (\$) Per User, Mobile Betting Services. Regional Forecasts 2007-2012.....	121
Table 6.20: Average Monthly Wager (\$) Per User, Mobile Betting Services. By Region 2007-2013.....	121
6.4.2 Total Mobile Betting Wagers.....	122
Figure 6.16: Total Wagers (\$m), Mobile Lottery Services. By Region, 2007-2013.....	122
Table 6.21: Total Wagers (\$m), Mobile Lottery Services. By Region, 2007-2013.....	122
6.4.3 Total Mobile Betting Gross Win.....	123
Figure 6.17: Total Mobile Betting Gross Win (\$m). By Region 2007-2013.....	123
Table 6.22: Total Mobile Betting Gross Win (\$m). By Region 2007-2013.....	123
<b>6.5 Total Market for Mobile Gambling Services.....</b>	<b>124</b>
6.5.1 Total Mobile Gambling Wagers.....	124
Figure 6.18 Total Wager (\$m) on Mobile Gambling Services, 2007-2013.....	124
Table 6.23: Total Wager (\$m) on Mobile Gambling Services, 2007-2013.....	124
6.5.2 Total Mobile Gambling Gross Win.....	124
Figure 6.19: Total Gross Win (\$m) on Mobile Gambling Services, 2007-2013.....	125
Table 6.24 Total Gross Win (\$m) on Mobile Gambling Services, 2007-2013.....	125

## 7. Recommendations

---

<b>7.1 Recommendations for Regulators .....</b>	<b>127</b>
<b>7.2 Recommendations for Operators and Vendors .....</b>	<b>128</b>
<b>7.3 Recommendations for Service Providers.....</b>	<b>130</b>

## 8. Technology

---

<b>8.1 Introduction .....</b>	<b>133</b>
<b>8.2 2G.....</b>	<b>133</b>
8.2.1 Communication Technologies of 2G.....	134
i. GSM.....	134
ii. TDMA.....	134
iii. CDMA.....	134
iv. D-AMPS.....	134
8.2.2 Data Services .....	135
i. SMS.....	135
a. The Working of SMS .....	135
Figure 8.1: SMS Message Flow.....	135
b. Types of Messaging Services .....	136
- Mobile-originated SMS .....	136
- Mobile-terminated SMS.....	136
c. Premium-rate SMS (PRSMS).....	136
<b>8.3 2.5 &amp; 2.75G .....</b>	<b>137</b>
8.3.1 Communication Technologies of 2.5/2.75G .....	137
i. GPRS .....	137
ii. EDGE.....	137
iii. CDMA2000.....	137
8.3.2 Data Services .....	137
i. MMS.....	137
a. How Does MMS Work?.....	138
Figure 8.2: MMS Application Services.....	138
b. MMS Services .....	138
- MMS Entertainment and Information Services.....	138
Figure 8.3: Nokia's 6280 3G Handset Supporting Video Streaming .....	139
c. Personalisation .....	139
8.3.3 The SMS/MMS Value Chain .....	139
Figure 8.4: SMS/MMS Value Chain.....	140
<b>8.4 3G.....</b>	<b>140</b>
Figure 8.5: 3G Access Technologies .....	140
Figure 8.6: Percentage of Mobile Users Who Own 3G Devices, December 2007 (Selected Countries) .....	142

Figure 8.7: Global 3G Subscriber Base, December 2007 (255.7 million users) .....	142
<b>8.4.1 UMTS</b> .....	<b>143</b>
Figure 8.8: Evolution of UMTS.....	143
i. WCDMA.....	143
ii. EV-DO .....	144
iii. TD-SCDMA.....	144
<b>8.5 Beyond 3G</b> .....	<b>144</b>
8.5.1 HSPA.....	145
8.5.2 3GLTE.....	145
8.5.3 CDMA2000 1x EV-DO Revisions A and B.....	145
8.5.4 UMB .....	146
8.5.5 Mobile WiMAX 802.16e-2005 .....	146
Figure 8.9: WiMAX Timeline .....	146
<b>8.6 Mobile Technologies Compared</b> .....	<b>147</b>
Table 8.1: Comparative Chart of Mobile Technologies .....	147
<b>8.7 Other Enabling Technologies</b> .....	<b>149</b>
8.7.1 Wireless Internet Technologies .....	149
i. WAP .....	149
a. The Development of WAP .....	149
b. The Future of WAP – Where is WAP Heading?.....	149
Figure 8.10: Future Path of WAP.....	150
ii. The i-mode Alternative.....	150
Figure 8.11: NTT DoCoMo, i-mode Subscriber Growth (m) and i-mode Penetration of Total User Base (%) 2000-Q2 2008.....	151
iii. dotMobi.....	151
8.7.2 Languages, Platforms and Operating Systems .....	152
i. Languages .....	152
a. Java .....	152
ii. Platforms .....	152
a. J2ME .....	152
b. BREW .....	153
iii. Operating Systems.....	153
a. Palm OS.....	153
b. Symbian .....	154
c. Windows Mobile.....	154
d. Android.....	155
10.7.3 Other Relevant Technologies and Standards.....	155
i. MP3 .....	155
Figure 8.12: MP3 Phones: Nokia N91 and Sony Ericsson K800.....	155
ii. MP4 .....	156
iii. MIDI .....	156
iv. Bluetooth .....	156