

CHAPTER ONE: INTRODUCTION.....	1
STUDY GOALS AND OBJECTIVES.....	1
REASONS FOR DOING THE STUDY .....	2
SCOPE AND FORMAT .....	2
INTENDED AUDIENCE.....	2
METHODOLOGY .....	3
ANALYSTS.....	3
RELATED BCC STUDIES .....	4
BCC ON-LINE SERVICES.....	4
DISCLAIMER .....	5
 CHAPTER TWO: SUMMARY.....	 6
DIGITAL PHOTOGRAPHY MARKETS: MAJOR MARKETS	
SUMMARY .....	6
<i>SUMMARY TABLE GLOBAL DIGITAL PHOTOGRAPHY MARKET BY</i>	
<i>PRODUCT TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	7
<i>SUMMARY FIGURE GLOBAL DIGITAL PHOTOGRAPHY MARKET BY</i>	
<i>PRODUCT TYPE, 2008–2016 (\$ MILLIONS)</i> .....	7
MARKET COMPETITORS.....	8
 CHAPTER THREE: INDUSTRY OVERVIEW.....	 9
HISTORY OF THE PHOTOGRAPHY INDUSTRY .....	9
HISTORY OF THE PHOTOGRAPHY ... (CONTINUED) .....	10
HISTORY OF THE PHOTOGRAPHY ... (CONTINUED) .....	11
DIGITAL CAMERA COMPONENTS AND SETTINGS .....	12
COMPONENTS.....	12
Lenses.....	12
Lenses (Continued) .....	13
Aperture .....	14
Focal Length.....	15
<i>TABLE 1 COMPARISON OF FOCAL LENGTHS FOR SELECT CROP</i>	
<i>SENSORS AND 35MM CAMERAS (MM)</i> .....	16
Imaging Sensors .....	16
RAW Camera Files .....	17
Processors .....	17
Video.....	18
Pixel Count and Image Ratios .....	18
Dynamic Range and Exposure .....	19
Graduated Neutral Density Filters.....	20
High Dynamic Range (HDR) .....	20
Autofocus Systems.....	20
Flash and Speedlights .....	21
CAMERAS .....	21
Digital Point-and-Shoot.....	21

Mirrorless Interchangeable Lens Cameras .....	22
Digital Single Lens Reflex (DSLR) .....	23
Medium Format .....	24
Large Format .....	24
CAMERA SETTINGS .....	24
<i>TABLE 2 DIGITAL CAMERA SETTINGS</i> .....	25
<i>TABLE 2 (CONTINUED)</i> .....	26
PHOTOGRAPHY COMPLEMENTARY PRODUCTS .....	26
Software .....	26
Plug-in Software .....	27
Online Photo Editing Software .....	27
Printers .....	27
Home Printers .....	28
Kiosk-Based Printers .....	28
Storage Products.....	29
Hard Drive .....	29
Flash Drive (USB).....	30
CompactFlash and Secure Digital Card .....	30
Sony Memory Stick .....	30
<i>TABLE 3 DIGITAL CAMERA MEMORY CARD SPECIFICATIONS</i> .....	31
END-USER MARKET COMPOSITION .....	31
COMMERCIAL AND PROFESSIONAL PHOTOGRAPHERS.....	32
Advertising Photography .....	33
Editorial and Photojournalism.....	33
Fashion/Glamour Photography .....	33
Forensic Photography.....	33
Portrait and Wedding Photography.....	33
Wildlife and Landscape Photography .....	34
AMATEUR AND HOBBY PHOTOGRAPHERS .....	34
CHAPTER FOUR: ISSUES AFFECTING THE MARKET .....	35
NUMBER OF PRO/SEMI-PRO PHOTOGRAPHERS .....	35
ELECTRONIC PORTFOLIOS VERSUS PRINT-BASED PORTFOLIOS .....	35
PROFESSIONAL PHOTOGRAPHY INDUSTRY GROWTH IN THE U.S. ....	35
<i>TABLE 4 U.S. EMPLOYMENT STATISTICS FOR PROFESSIONAL PHOTOGRAPHERS, 2008–2018 (% BY SEGMENT)</i> .....	36
WAGES AND LEVEL OF SELF-EMPLOYMENT .....	36
<i>TABLE 5 AVERAGE ANNUAL PAY FOR U.S. PHOTOGRAPHERS COMPARED TO ALL ARTS, DESIGN, ENTERTAINMENT, SPORTS AND MEDIA OCCUPATIONS</i> .....	37
INDICATORS FOR PRO OR SEMI-PRO PHOTOGRAPHY INDUSTRY .....	37

<i>TABLE 6 INDICATORS FOR THE PROFESSIONAL PHOTOGRAPHER</i>	
<i>INDUSTRY, 2008 AND 2009</i> .....	38
CHANGES IN PHOTOJOURNALISM.....	38
CONSUMER TRENDS.....	39
STAYING COMPETITIVE.....	39
OPPORTUNITIES WITHIN ADVANCED AMATEUR AND PROSUMER PHOTOGRAPHY .....	40
<i>TABLE 7 UNIT SALES GROWTH OF INTERCHANGEABLE AND COMPACT CAMERAS, THROUGH 2011</i> .....	
	41
<i>TABLE 8 GLOBAL COMPACT DIGITAL CAMERA SALES BY COMPANY THROUGH 2011 (UNITS IN MILLIONS)</i> .....	
	42
<i>TABLE 9 GLOBAL DIGITAL SLR/MILC CAMERA SALES BY COMPANY THROUGH 2011 (UNITS IN MILLIONS)</i> .....	
	42
RETAIL CHAIN BANKRUPTCIES .....	43
<i>TABLE 10 U.S. CAMERA AND PHOTOGRAPHIC STORE BUSINESS PATTERNS, THROUGH 2010</i> .....	
	43
<i>FIGURE 1 U.S. CAMERA AND PHOTOGRAPHIC STORE BUSINESS PATTERNS, 2006-2010 (NUMBER)</i> .....	
	44
DIGITAL STOCK PHOTOGRAPHY.....	44
DIGITAL STOCK PHOTOGRAPHY (CONTINUED) .....	45
CREATIVE COMMONS LICENSES.....	46
STOCK/MICROSTOCK INDUSTRY TRENDS.....	47
PHOTOGRAPHY AND THE LAW.....	48
PHOTO PRINTING .....	49
TRADITIONAL PHOTO PRINT SEGMENT.....	49
BACKENDING.....	49
CUSTOMIZED MERCHANDISE SEGMENT.....	50
WATERPROOF/SHOCKPROOF CAMERAS .....	51
DIGITAL APPLICATIONS IN SPECIALIZED INDUSTRIES .....	51
MEDICAL APPLICATIONS.....	52
General Medical Applications .....	52
Robotic-Assisted Surgery .....	52
Ophthalmic .....	53
Dental.....	53
Cosmetic Surgery.....	53
Medical Records and Documentation .....	54
INDUSTRIAL/TRANSPORTATION/MILITARY .....	54
Automobile Applications .....	54
Traffic Monitoring .....	54
Battlefield/Surveillance.....	55
DIGITAL PHOTOGRAPHY AND THE INTERNET .....	55
INTERNET-BASED PHOTO SHARING SITES .....	55
<i>TABLE 11 FLICKR USER STATISTICS, 2011</i> .....	
	56
Social Media and Photo Display .....	56

Facebook.....	56
<i>TABLE 12 FACEBOOK USER STATISTICS, 2011</i> .....	57
Google+.....	57
INTERNATIONAL ECONOMIC INDICATORS.....	57
BRAZIL.....	57
CHINA.....	58
INDIA.....	59
MEXICO.....	59
SOUTH KOREA.....	60
TAIWAN.....	60
CHAPTER FIVE: TECHNOLOGY.....	61
NEW TECHNOLOGIES.....	61
WI-FI-ENABLED CAMERAS.....	61
LIGHT FIELD CAMERA.....	62
INCREASING FRAMES-PER-SECOND.....	63
MEGAPIXELS.....	63
TOTAL MEGAPIXELS VERSUS PIXEL DENSITY.....	64
<i>TABLE 13 CAMERA AND MEGAPIXEL COMPARISON</i> .....	65
Nikon D800/D800e.....	65
INTERNAL NOISE REDUCTION.....	65
SENSORS.....	66
<i>TABLE 14 COMPARISON OF SENSOR SIZES AND CORRESPONDING</i> <i>SENSOR AREA</i> .....	66
SENSOR COSTS.....	67
FOVEON SENSORS.....	67
HASSELBLAD MULTI-SHOT.....	67
CMOS VERSUS CCD.....	68
<i>TABLE 15 CMOS VERSUS CCD SENSOR COMPARISON</i> .....	68
<i>TABLE 16 USE OF CMOS AND CCD SENSORS BY SELECT</i> <i>MANUFACTURER, 2012</i> .....	69
BACKLIT OR BACK-ILLUMINATED CMOS SENSORS.....	69
AUTOFOCUS LAG.....	70
SHUTTER LAG.....	70
IMAGE STABILIZATION.....	70
IMAGE STABILIZATION (CONTINUED).....	71
TRANSLUCENT MIRROR.....	72
REAL-TIME ADJUSTMENT VIEWING.....	72
VIDEO.....	72
3-D VIDEO.....	73
COMPACT LARGE-SENSOR FIXED-LENS CAMERAS.....	74
CHAPTER SIX: PATENT ANALYSIS.....	75
PATENT ANALYSIS.....	75
PATENTS BY SEGMENT.....	76

<i>TABLE 17 NUMBER OF PATENTS BY SEGMENT, ALL YEARS, 1976 TO PRESENT</i> .....	76
<i>FIGURE 2 NUMBER OF PATENTS BY SEGMENT, ALL YEARS, 1976 TO PRESENT</i> .....	77
<i>TABLE 18 RECENT PATENT EVALUATION BY PRODUCT SEGMENT</i> .....	78
<i>TABLE 18 (CONTINUED)</i> .....	79
<i>TABLE 18 (CONTINUED)</i> .....	80
DIGITAL CAMERA PATENTS.....	80
<i>TABLE 19 NUMBER OF DIGITAL CAMERA PATENTS AND NUMBER OF TOTAL COMPANY PATENTS PER ASSIGNEE</i> .....	80
<i>TABLE 19 (CONTINUED)</i> .....	81
SILVERBROOK RESEARCH.....	81
SANYO ELECTRIC.....	81
<i>FIGURE 3 NUMBER OF PATENTS PER ASSIGNEE INCLUDING DIGITAL CAMERA PATENTS</i> .....	82
CANON KABUSHIKI .....	83
EASTMAN KODAK .....	83
FUJIFILM CORPORATION.....	83
DIGITAL CAMERA PATENTS BY YEAR.....	83
<i>TABLE 20 NUMBER OF DIGITAL CAMERA PATENTS ISSUED PER YEAR 2000–2011</i> .....	84
<i>FIGURE 4 NUMBER OF DIGITAL CAMERA PATENTS ISSUED PER YEAR 2000–2011</i> .....	84
CHAPTER SEVEN: : MARKET SEGMENTS AND ANALYSIS.....	85
OVERVIEW OF THE DIGITAL PHOTOGRAPHY MARKET .....	85
<i>TABLE 21 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY PRODUCT TYPE THROUGH 2016 (\$ MILLIONS)</i> .....	85
<i>FIGURE 5 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY PRODUCT TYPE 2008–2016 (\$ MILLIONS)</i> .....	86
<i>FIGURE 6 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY PRODUCT TYPE, 2011 (% SHARE)</i> .....	86
<i>FIGURE 6 (CONTINUED)</i> .....	87
PRODUCT SEGMENTS AND MARKET FORECAST .....	87
DIGITAL CAMERAS AND LENSES .....	87
<i>TABLE 22 GLOBAL DIGITAL CAMERA AND LENS MARKET BY PRODUCT TYPE THROUGH 2016 (\$ MILLIONS)</i> .....	88
<i>FIGURE 7 GLOBAL DIGITAL CAMERA AND LENS MARKET BY PRODUCT TYPE 2008–2016 (\$ MILLIONS)</i> .....	88
Digital Camera Market .....	88
Camera Market Overview .....	89
<i>TABLE 23 GLOBAL DIGITAL CAMERA MARKET BY TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	89
<i>FIGURE 8 GLOBAL DIGITAL CAMERA MARKET BY TYPE, 2008–2016 (\$ MILLIONS)</i> .....	90

<i>FIGURE 9 GLOBAL DIGITAL CAMERA MARKET BY TYPE, 2011 (% SHARE)</i> .....	90
<i>FIGURE 9 (CONTINUED)</i> .....	91
Interchangeable Lens Market Overview .....	91
<i>TABLE 24 GLOBAL INTERCHANGEABLE LENS MARKET BY TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	91
<i>FIGURE 10 GLOBAL INTERCHANGEABLE LENS MARKET BY TYPE, 2008–2016 (\$ MILLIONS)</i> .....	92
PHOTO PRINTERS, KIOSKS, AND PROCESSING EQUIPMENT .....	92
<i>TABLE 25 GLOBAL PHOTO PRINTER, KIOSK AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	93
<i>FIGURE 11 GLOBAL PHOTO PRINTER, KIOSK AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY TYPE, 2008–2016 (\$ MILLIONS)</i> .....	93
Printer Market Overview .....	94
<i>TABLE 26 GLOBAL PRINTER (HARDWARE) MARKET BY TYPE THROUGH 2016 (\$ MILLIONS)</i> .....	94
<i>FIGURE 12 GLOBAL PRINTER (HARDWARE) MARKET BY TYPE, 2008–2016 (\$ MILLIONS)</i> .....	95
<i>FIGURE 13 GLOBAL PRINTER (HARDWARE) MARKET BY TYPE, 2011 (% SHARE)</i> .....	95
<i>FIGURE 13 (CONTINUED)</i> .....	96
Kiosk and Processing Equipment Overview.....	96
<i>TABLE 27 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	97
<i>FIGURE 14 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY TYPE, 2008–2016 (\$ MILLIONS)</i> .....	97
<i>FIGURE 15 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY TYPE, 2011 (% SHARE)</i> .....	98
COMPLEMENTARY PRODUCTS IN DIGITAL PHOTOGRAPHY .....	98
Digital Card Storage.....	99
Digital Photo Frames .....	99
Photo Editing Software .....	100
<i>TABLE 28 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY TYPE, THROUGH 2016 (\$ MILLIONS)</i> .....	101
<i>FIGURE 16 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY TYPE, 2008-2016 (\$ MILLIONS)</i> .....	101

<i>FIGURE 17 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY TYPE, 2011 (% SHARE)</i> .....	102
<i>GLOBAL MARKETS BY GEOGRAPHICAL REGION</i> .....	102
<i>TABLE 29 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY REGION, THROUGH 2016 (\$ MILLIONS)</i> .....	103
<i>FIGURE 18 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY REGION, 2008–2016 (\$ MILLIONS)</i> .....	103
<i>FIGURE 19 GLOBAL DIGITAL PHOTOGRAPHY MARKET BY REGION, 2011 (% SHARE)</i> .....	104
<i>DIGITAL CAMERA MARKET BY REGION</i> .....	104
<i>TABLE 30 GLOBAL DIGITAL CAMERA MARKET BY REGION THROUGH 2016 (\$ MILLIONS)</i> .....	105
<i>FIGURE 20 GLOBAL DIGITAL CAMERA MARKET BY REGION, 2008–2016 (\$ MILLIONS)</i> .....	106
<i>FIGURE 21 GLOBAL DIGITAL CAMERA MARKET BY REGION, 2011 (% SHARE)</i> .....	106
<i>FIGURE 21 (CONTINUED)</i> .....	107
<i>DIGITAL CAMERA LENS MARKET BY REGION</i> .....	107
<i>TABLE 31 GLOBAL INTERCHANGEABLE LENS MARKET BY REGION, THROUGH 2016 (\$ MILLIONS)</i> .....	108
<i>FIGURE 22 GLOBAL INTERCHANGEABLE LENS MARKET, BY REGION, 2008-2016 (\$ MILLIONS)</i> .....	108
<i>FIGURE 23 GLOBAL INTERCHANGEABLE LENS MARKET BY REGION, 2011 (% SHARE)</i> .....	109
<i>PHOTO PRINTER MARKET BY REGION</i> .....	109
<i>TABLE 32 GLOBAL PRINTER (HARDWARE) MARKET BY REGION THROUGH 2016 (\$ MILLIONS)</i> .....	110
<i>FIGURE 24 GLOBAL PRINTER (HARDWARE) MARKET BY REGION, 2008–2016 (\$ MILLIONS)</i> .....	111
<i>FIGURE 25 GLOBAL PRINTER (HARDWARE) MARKET BY REGION, 2011 (% SHARE)</i> .....	111
<i>FIGURE 25 (CONTINUED)</i> .....	112
<i>PHOTO KIOSK AND PROCESSING EQUIPMENT MARKET BY REGION</i> .....	112
<i>TABLE 33 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY REGION, THROUGH 2016 (\$ MILLIONS)</i> .....	113
<i>FIGURE 26 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY REGION, 2008–2016 (\$ MILLIONS)</i> .....	113
<i>FIGURE 27 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY REGION, 2011 (% SHARE)</i> .....	114

DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY REGION.....	114
TABLE 34 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY REGION, THROUGH 2016 (\$ MILLIONS).....	115
FIGURE 28 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS MARKET BY REGION, 2008–2016 (\$ MILLIONS).....	115
FIGURE 29 GLOBAL DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCT MARKET BY REGION, 2011 (% SHARE).....	116
CHAPTER EIGHT: COMPETITIVE STRUCTURE AND MARKET SHARE.....	117
COMPANY ACQUISITIONS, COLLABORATIONS AND ALLIANCES.....	117
PENTAX/RICOH.....	117
SONY/KONICA/MINOLTA.....	117
BLACKSTONE GROUP/LEICA AG.....	117
INDUSTRY PARTICIPANTS BY SEGMENT.....	118
TABLE 35 MAJOR INDUSTRY PARTICIPANTS BY PRODUCT TYPE.....	118
TABLE 35 (CONTINUED).....	119
FIGURE 30 MAJOR INDUSTRY PARTICIPANTS BY PRODUCT TYPE.....	119
DIGITAL CAMERA COMPETITIVE ANALYSIS.....	119
TABLE 36 GLOBAL DIGITAL CAMERA MARKET BY COMPANY 2008–2011 (\$ MILLIONS).....	120
FIGURE 31 GLOBAL DIGITAL CAMERA MARKET BY COMPANY 2008–2011 (\$ MILLIONS).....	121
FIGURE 32 GLOBAL SHARE OF THE DIGITAL CAMERA MARKET BY COMPANY, 2011 (% SHARE).....	121
FIGURE 32 (CONTINUED).....	122
COMPACT DIGITAL CAMERA COMPETITORS.....	122
TABLE 37 GLOBAL COMPACT DIGITAL CAMERA MARKET BY COMPANY, 2008–2011 (\$ MILLIONS).....	123
FIGURE 33 GLOBAL COMPACT DIGITAL CAMERA MARKET BY COMPANY, 2008–2011 (\$ MILLIONS).....	123
FIGURE 34 GLOBAL COMPACT DIGITAL CAMERA MARKET BY COMPANY, 2011 (% SHARE).....	124
DIGITAL SLR/MILC CAMERA COMPETITORS.....	124
TABLE 38 GLOBAL DIGITAL SLR/MILC CAMERA MARKET BY COMPANY, 2008–2011 (\$ MILLIONS).....	125
FIGURE 35 GLOBAL DIGITAL SLR AND MILC MARKET BY COMPANY, 2008–2011 (\$ MILLIONS).....	126
FIGURE 36 GLOBAL SHARE OF THE DIGITAL SLR AND MILC MARKET BY COMPANY, 2011 (% SHARE).....	126
FIGURE 36 (CONTINUED).....	127
DIGITAL CAMERA LENS COMPETITIVE ANALYSIS.....	127
TABLE 39 GLOBAL INTERCHANGEABLE LENS MARKET BY COMPANY, 2008–2011 (\$ MILLIONS).....	127



<i>FIGURE 37 GLOBAL INTERCHANGEABLE LENS MARKET BY COMPANY, 2008–2011 (\$ MILLIONS)</i> .....	128
<i>FIGURE 38 GLOBAL SHARE OF THE INTERCHANGEABLE LENS MARKET BY COMPANY, 2011 (% SHARE)</i> .....	128
<i>FIGURE 38 (CONTINUED)</i> .....	129
PHOTO PRINTER COMPETITIVE ANALYSIS.....	129
<i>TABLE 40 GLOBAL PRINTER (HARDWARE) MARKET BY COMPANY, 2008–2011 (\$ MILLIONS)</i> .....	130
<i>FIGURE 39 GLOBAL PRINTER (HARDWARE) MARKET BY COMPANY, 2008–2011 (\$ MILLIONS)</i> .....	130
<i>FIGURE 40 GLOBAL SHARE OF THE PRINTER (HARDWARE) MARKET BY COMPANY, 2011 (% SHARE)</i> .....	131
PHOTO KIOSK AND PROCESSING EQUIPMENT COMPETITIVE ANALYSIS.....	131
<i>TABLE 41 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY COMPANY, 2008–2011 (\$ MILLIONS)</i> .....	132
<i>FIGURE 41 GLOBAL PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY COMPANY, 2008–2011 (\$ MILLIONS)</i> .....	132
<i>FIGURE 42 GLOBAL SHARE OF THE PHOTO PRINTER KIOSKS AND DIGITAL PHOTO PROCESSING EQUIPMENT MARKET BY COMPANY, 2011 (% SHARE)</i> .....	133
DIGITAL PHOTOGRAPHY COMPLEMENTARY PRODUCTS	
COMPETITIVE SUMMARY.....	133
DIGITAL STORAGE PRODUCTS.....	133
DIGITAL PHOTO FRAMES.....	134
PHOTO EDITING SOFTWARE.....	134
CHAPTER NINE: COMPANY PROFILES.....	135
ADOBE SYSTEMS, INC.....	135
<i>TABLE 42 ADOBE'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)</i> ....	136
<i>FIGURE 43 ADOBE'S COMPANY REVENUES 2009–2011 (\$ MILLIONS)</i> .....	137
APPLE INC.....	137
APPLE INC. (CONTINUED).....	138
<i>TABLE 43 APPLE'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)</i> .....	139
<i>FIGURE 44 APPLE'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)</i> .....	139
CANON, INC.....	139
<i>TABLE 44 CANON'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)</i> ....	140
<i>FIGURE 45 CANON'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)</i> .....	141
COREL CORPORATION.....	141
EPSON CORPORATION.....	142

<i>TABLE 45 EPSON'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS).....</i>	<i>143</i>
<i>FIGURE 46 EPSON'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>143</i>
<i>FUJIFILM HOLDINGS CORPORATION.....</i>	<i>144</i>
<i>TABLE 46 FUJIFILM'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>145</i>
<i>FIGURE 47 FUJIFILM'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>145</i>
<i>HASSELBLAD AB.....</i>	<i>146</i>
<i>LEICA CAMERA AG.....</i>	<i>146</i>
<i>TABLE 47 LEICA'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS).....</i>	<i>147</i>
<i>FIGURE 48 LEICA'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)....</i>	<i>148</i>
<i>MICRON TECHNOLOGY, INC.....</i>	<i>148</i>
<i>TABLE 48 MICRON'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>149</i>
<i>FIGURE 49 MICRON'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>150</i>
<i>NIKON CORPORATION.....</i>	<i>150</i>
<i>TABLE 49 NIKON'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS).....</i>	<i>151</i>
<i>FIGURE 50 NIKON'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>152</i>
<i>PANASONIC CORPORATION.....</i>	<i>152</i>
<i>TABLE 50 PANASONIC'S COMPANY REVENUES 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>153</i>
<i>FIGURE 51 PANASONIC'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>154</i>
<i>SANDISK CORPORATION.....</i>	<i>154</i>
<i>TABLE 51 SANDISK'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>155</i>
<i>FIGURE 52 SANDISK'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>156</i>
<i>SEAGATE TECHNOLOGY PLC.....</i>	<i>156</i>
<i>TABLE 52 SEAGATE'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>157</i>
<i>FIGURE 53 SEAGATE'S COMPANY REVENUES, 2009–2011 (\$</i>	
<i>MILLIONS).....</i>	<i>157</i>
<i>SIGMA CORPORATION.....</i>	<i>158</i>
<i>SONY CORPORATION.....</i>	<i>158</i>
<i>TABLE 53 SONY'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS).....</i>	<i>159</i>
<i>FIGURE 54 SONY'S COMPANY REVENUES, 2009–2011 (\$ MILLIONS)....</i>	<i>160</i>
<i>WESTERN DIGITAL CORP.....</i>	<i>160</i>
<i>TABLE 54 WESTERN DIGITAL'S COMPANY REVENUES, 2009–2011</i>	
<i>(\$ MILLIONS).....</i>	<i>161</i>

*FIGURE 55 WESTERN DIGITAL'S COMPANY REVENUES, 2009–2011*

<i>(\$ MILLIONS)</i> .....	161
APPENDICES.....	162
APPENDIX I – LEADING MANUFACTURERS AND AFFILIATED COMPANIES .....	162
ADOBE SYSTEMS INC.....	162
ALTEK CORPORATION .....	162
APPLE, INC. ....	162
BROTHER INDUSTRIES, LTD. ....	162
CANON, INC.....	162
CASIO COMPUTER CO., LTD.....	163
COREL CORPORATION .....	163
ELECTROPHYSICS CORP .....	163
EPSON CORPORATION .....	163
FOVEON, INC.....	163
FUJIFILM HOLDINGS CORPORATION .....	163
HASSELBLAD AB .....	164
HEWLETT-PACKARD CO. ....	164
INTUITIVE SURGICAL, INC. ....	164
KODAK CO.....	164
LEICA CAMERA AG .....	164
LEXMARK INTERNATIONAL INC.....	164
LYTRO, INC. ....	165
MAMIYA DIGITAL IMAGING CO., LTD.....	165
MICRON TECHNOLOGY, INC. ....	165
NIKON CORPORATION .....	165
NORITSU AMERICA.....	165
OLYMPUS CORPORATION .....	165
OMNIVISION TECHNOLOGIES, INC. ....	165
PANASONIC CORPORATION .....	166
PENTAX .....	166
PHASE ONE A/S.....	166
QUALCOMM, INC.....	166
RICOH COMPANY, LTD.....	166
RITEK CORPORATION .....	166
SAMSUNG ELECTRONICS CO., LTD.....	166
SANDISK CORPORATION .....	167
SANYO ELECTRIC CO. ....	167
SEAGATE TECHNOLOGY PLC.....	167
SIGMA CORPORATION. ....	167
SILVERBROOK RESEARCH PTY. LTD.....	167
SONY CORPORATION .....	167
TAMRON CO., LTD. ....	167
TOPCON MEDICAL SYSTEMS, INC.....	168

VIVITAR (SAKAR INTERNATIONAL INC.) .....	168
WESTERN DIGITAL CORP .....	168
XEROX CORPORATION .....	168
APPENDIX II – RELEVANT ASSOCIATIONS AND ORGANIZATIONS .....	168
NATIONAL PRESS PHOTOGRAPHERS ASSOCIATION.....	168
PROFESSIONAL PHOTOGRAPHERS OF AMERICA.....	168
WPPI (WEDDING AND PORTRAIT PHOTOGRAPHERS INTL.) .....	168