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The Hong Kong Polytechnic University **PolyU-IDT Innovative Entrepreneur Contest** Bright & Charming Inc.

**Business plan** Skin color tone index sensor. Title: Category:

IT & Health Care



Bright On Faith

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## 1. Executive Summary

## 1.1) Description of the Business Concept and the Business

We are going to set up a company called **Bright&Charming** which is targeting at modern personal cosmetology. We found that the cosmetology is one of fastest growth industries in Hong Kong even during the economic downturn. The personal care market is composed of "pale" products very largely. Our business is supplying a trusted device for personal measurement, which is no substitute one, the recent market.

The first product of our company is **Bright on Faith**. (**BoF**). BoF is an small size portable electronic device using the theory of light absorption and reflection then return an indicator to consumer, and BoF has storage capacity that let consumer keep track on the their skin color tone and provides high accurate resolution of the change of skin color that human eyes might not distinguish that kind of small differences. The appearance of BoF is cell phone size, colorful and printed with cute cartoon characters.

### 1.2) The Opportunity and the Strategy

We found that the standard advertisement of "pale" products is "stars", they usually show up on TV ads, then sell the products by implicitly connoting the effect after using the products will be as good as what you can see on TV. Then people buy. The "pale" products available on the market are cream, lotion and mask etc. which mostly claim that they can regulate and pale skin in short time. Nonetheless that, they never present how it improvements skin after using their products in term of comprehensive data. We can see that there are many "pale" products on stock without any clinical experience support. In the mean time the market research showed that consumers cannot sure the gradual change of skin color tone while in the treatment period. We are focusing on the market gap and provide a simple solution for those who are using "pale" product but curios the "pale" level they improved.

Furthermore, consumer is able to know how their skin color changed after the sun light, should they go out for a walk under high UV index sunshine day? How long should they take a sunbath that would not be too much or too less?

The future development of BoF is that we expect the product will integrate with timer, alarm, and infrared thermometer. Since the body temperature is a common concern about health, the storage capacity of BoF is an excellent media to watch sudden change of body temperature.

The overall strategy is that we are going to strike the market by selling our products to reputable retailers at the price of \$100 for each BoF. This is a fair price to such useful and functional product while at the same time this price can also build up an image that this is an high technological product on personal cosmetology. Then we will let the potential consumers and the public knows our product

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#### FileName: ExecutiveSummary\_BOF.doc

BoF by advertising on mainly Roadshow, direct sale, MTR, KCRC and supplemented by TV. These are the best way as they can reach a large scale of potential consumer. In the same time, we try to establish a trustful image by showing the experimental sample. Then we will reach the retailers by the partners instead of salesman in order to save marketing cost.

On the other hand, we will try to entry Mainland market. There is many fake personal care products on the market which has become a serious problems for Mainland consumer. Mainland consumer is very concerned their expenditure is worth or not. We can see much news reported that the products made of so-called modern technology are nothing special or even useless. Our product BoF is an easy way for those Mainland consumers tries to distinguish what is the effect of their "pale" product. We will try to seek partnership with Mainland company as joint venture. Our advertisement will on public transportation station and large-scale shopping malls.

## 1.3) <u>The Economics, profitability, and harvest potential</u>

Our product is targeting on 3 group of consumers, 1. aged 15~24 female, 2. cosmetic products consumers, 3. frequently outdoor activities female. In our market research, we found that, that group of people has the potential of 80% interested in BoF or something function like BoF.

BoF is manufactured in Mainland China, each cost of product is HK\$62.13 and we sell it at HK\$100, in overall, that product is profitable. The promotional cost we decided to expense for the first wave advertisement is \$1million. BoF will be sold in cosmetic shops and shopping kiosks for reaching most of our potential customer and supplemented by MTR, KCRC ads and show broad. We estimate BoF will be sold 9000pcs in first year, and 26thousandpcs in next year, then our product will enter to maturity the sales we projected is 78thousandpcs on 2007.

There is no substitution available on market, BoF is a totally new product to help customers to sense their skin color tone on a scientific way. We are going to establish a trustful image, that BoF is a user-friendly and accurate device suitable for daily use. Some close products for skin color tone indexing do not have storage ability and very low resolution , which is not designed for daily use compared to BoF. Many "pale" products available on market are few weeks treatments, and consumers used that kind of "pale" product should watch on their skin color change daily in order to check the effectiveness.

BoF is programmable and based on microcomputer, the next generation of BoF can be developed to meet the future market. Such as the functionality and the user interface can be developed in convenient way onto pervious version of BoF. The continuous add-ons development design helps us to save R&D cost and to be market oriented.

The potential of cosmetic product market is increasing every year, therefore we believe our product, BoF, is sustainable.

1.4) The Team

#### FileName: ExecutiveSummary\_BOF.doc

The team would initially be owned by 2 people, they are CHAN Man Chit and WONG Tang Paai in partnership form. They will contribute 2million Hong Kong dollars each to Bright&Charming and borrow HK\$4million bank loan to start the initial cost and business investment for the first year. And revenue after the operation will put into further expense of company.

## 1.5) The Offering

BoF is a small portable device equipped with microcomputer and flash memory for use to keep the daily data. The mono LCD display can show English and numbers. Users have to hold BoF to attach their skin, and some readings and indicators will be displayed on the LCD. And the data will be stored for next time reference and trace.

Description of BoF in summary:

- Small size, (handheld size)
- High resolution
- Use dry battery
- 2K flash memory for data storage
- Dot matrix LCD display
- Microcomputer base for analyzing data
- Use light reflection, no direct contact to user's skin
- · Programmable, easy for further develop of next generation BoF

BoF can observer a small change of skin color tone and the analyzed data will be displayed on LCD that is easy to read and understand. That helps "pale" product consumers to keep track on their pale treatment daily in home. The customers of BoF need not to go to cosmetic center for skin color analysis.

FileName: The IndustryAndCompanyItsProduct\_BOF.doc

2. The Industry and the Company and its Product(s) or Services(s)

## 2.1) The Company and Concept

**Bright&Charming** is the name of our company. The company is targeting at the young and cosmetic product consumers. "Bright" not only the on the skin, also meaning clever and intelligent, our company offers a clever way to personal care market. We aim at firstly, making products specification and analyze the technological and market feasibility of the products and then assign factories to manufacture the product.

## 2.1a.) Company OwnerShip

The company would initially be owned by 2 people, they are CHAN Man Chit, WONG Tang Paai in partnership form. Further observation on the company's product performance would decide the business ownership in the later stage. That is, switch our company to limited company form to attract more shareholders for Bright&Charming. The start up capital will be financed mainly by partner capital contribution and supplemented by bank loan. Then the company will use the retained capital to put into the developmental and operational cost.

## 2.1b.) Start up Summary

In the first year, we prepare to hire one system administrator to work on the computer system and web-server of the computer, one clerk to handle the clerical duties. Chan and Wong will be responsible for planning and organizing activities of the company. We decided that the stocks will be directly stored into our office so that we can save some of the warehouse cost.

Legal and business registration	\$2,000
Office rent (20000*3)	\$60,000
Furniture and Equipment Purchase	\$100,000
Clerk (7000*3)	\$48,550
Production cost (first payment)	\$270,000
Operating expenses	\$20,610
Patent	\$200,000
Total	\$701,160

## 2.1c.) Company Missions

There are mainly 4 missions of our company:

- 1. Looking for the miss of cosmetic products in technological way.
- 2. Help consumers to choose suitable cosmetic products by our products.
- 3. Make use of existing low-cost technology to substitute non-portable and expensive cosmetic instruments.
- 4. To provide premium solutions to the cosmetic industry.

# FileName: The IndustryAndCompanyItsProduct\_BOF.doc 2.2) The Product(s) or Service(s)

**Bright on Faith** is an electronic device using the light reflection and absorption theory to measure the color on the skin, than analyze the data by internal microcomputer. User hold BoF attached to the skin, it will take 3 second to get the skin color data then the microcomputer will store the measured data to flash memory. In case the battery fails, the pervious data will not be lost. BoF will compare every new data to pervious data and the analyzed result will be on the screen.

## 2.2a.) Usage

Bright on Faith is designed for measure skin color tone easily. The data will be analyzed and than displayer an indicator to user showing how is their skin color tone looked and how is the change of this tone compare to pervious data. BoF can help them to plan their "pale" strategy and give them a feedback of their existing cosmetic products.

## 2.2b.) Product size and shape



The size of BoF is small, about 6cm\*12cm\*1.5cm. It would be smaller after a deeply development. The sensor is on the back, and the display is supplemented by led backlight.

## 2.2c.) Key to Success (Bright on Faith)

- Firstly, the market potential is very large, the turnover of cosmetic product, "pale" product is increasing every year.
- Many pale product alleges their effect, but without trusted data or clinical experiments support. Human eyes distinguish the effect on the product mainly even though that is not trustful way. The small and slow changes on the skin color tone are cannot easily be detected my human eyes.
- The Hi-tech color tone analyzers are expensive not portable, these machine, available on cosmetic centers/shops, are not designed for personal daily use. BoF is the best way to do the measurement daily.

## FileName: MarketRearch&Analysis\_BOF.doc 3. Market Research and Analysis

From Population by Age Group and Sex static, releases by Census & statistics Department, Hong Kong, 17/2/04, we found the population of the age group 15-24 female is about 433,100 people.

After conducting a market research by using questionnaire on 200 female, we can see 70% of respondents (age group of 15-28 female) do care about their skin color tone, and they have the highly tendency to record or compare their skin color tone in everyday. By the survey result, there will be 3.5% female in these group must buy our products in the first 12 month, and 10% of them responded should buy the BoF, 30% consider may buy the BoF. Therefore, we regard there will be 3.5% early adopters, the correction factor, is represent the greatest intention to buy. That is we only assume 60% of those who said they must buy will really buy BoF eventually. In other words, the estimated sales in the first 12 months is 433,100\*5.5%\*0.6 = 9095.1units, and 25986 customers in the second year, following is 77958 customers.

Market Size					
Total No. Of Potential		%of pe	ople will buy th	ne Bof	
People	must	should	may	consider	project
433,100	0.035	0.1	0.3	0.25	0.15
Correction					
Factor :	0.6				
Year	2005	2006	2007	2008	2009
No. of Customers	9095.1	25,986	77,958	64,965	38,979

## 3.1) Market size

### Population by Age Group and Sex

Age group	Mid-2003*					Er	nd-2003#	
	Male	Female	Total	% of total	Male	Female	Total	% of total
	('000)	('000)	('000)	population	('000)	('000)	('000)	population
10 - 14	223.0	210.7	433.7	6.4	220.3	207.7	428.0	6.3
15 - 19	223.5	211.9	435.4	6.4	226.2	214.9	441.1	6.5
20 - 24	222.3	221.2	443.5	6.5	223.1	224.3	447.4	6.6
25 - 29	229.4	261.3	490.7	7.2	226.6	256.1	482.7	7.1
30 - 34	250.7	335.5	586.2	8.6	248.0	329.4	577.4	8.5

(Source releases by Census & statistics Department, Hong Kong, 17/2/04)

#### *FileName: MarketRearch&Analysis\_BOF.doc* "Resident population" approach

		Male	6	Fema	le	
		Number	%	Number	%	Total
		('000)	of total	('000)	of total	('000)
2003	Mid-year*	3 294.0	48.4	3 509.1	51.6	6 803.1
	End-year#	3 291.8	48.3	3 518.3	51.7	6 810.1

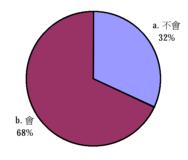
(Source releases by Census & statistics Department, Hong Kong, 17/2/04)

### Population of the age group 15-24 for Female: 433,100

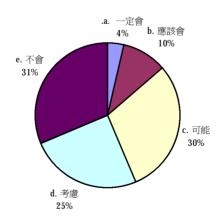
From above static we found the population of the age group 15-24 for female is about 40 million people.

## 3.2) Key result of questionnaire

Q3. 會不會關注/著重自己的膚色? (黝黑/白/等..)



Q13. 如果市場上有一件電子產品價錢爲\$150, 它能量度你的膚色深淺度, 就像量體重般, 你會買嗎?



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# FileName: MarketRearch&Analysis\_BOF.doc 3.3) <u>Questionnaire</u>

#### No. Of People 1年齡組別 a.15以下 4 b. 15 - 18 46 c. 19 - 23 86 d. 24 - 29 56 e. 29 - 35 4 2 f. 36 - 42 g. 42以上 2 200 2教育程度 a. 研究生 12 b. 大學 90 **C**. 高中 74 e. 中學 24 200 3會不會關注/著重自己的膚色? (黝黑/白/等..) a. 不會 64 **b**. 會 136 200 4有沒有為了使膚色較白而使用聲稱具美白較果的產品? a. 沒有 70 **b**.有 130 200 5有沒有定期觀察/比較自己的膚色? a. 沒有 96 **b**.有 104 200 6 觀察/比較自己的膚色的平均次數 a. 更密 4 b. 早晚一次 68 c. 每天一次 58 d. 每三天一次 30 e. 每星期一次 20 f. 更少 20 200 7 定期地使用多少種美容護膚品? a. 1 58 b. 2 68 42 c. 3 24 d. 4 e. 5 8 200 8你能清楚地比較一個月前的膚色嗎?(比較白了/比較黃了/...) **a.**能 86

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FileName: MarketRearch&Analysis_BOF.doc	
b. 不能	114
	200
9當比較兩人膚色時,你會比較那一個部位?(可多項)	
a. 面	110
b. 頸	6
c. 額頭	24
d. 手臂	42
e. 手背	8
f. 小腿	4
g. 大腿	6
	200
10 現在市面有很多聲稱能美白的產品. 若你曾使用, 請問有否以下的經驗?	
1. 使用前後不能看見膚色的分別	
2. 當美白後, 發覺較果不能維持太久	
a. 沒有	110
b. 有	90
	200
11 你會否在使用美白產品的過程中將自己的膚色記錄來比較產品的功效?	
a. 會	24
b. 不會	68
c. 想作記錄但沒有方法	108
	200
12 你用於美白產品的每月費用有多少?	
.a.100以下	54
b.100-200	78
c. 300-400	55
d. 400以上	13
	200
如果市場上有一件電子產品價錢為\$150,它能量度你的膚色深淺度,就像量體 13 重般,你會買嗎?	
.a. 一定會	7
b. 應該會	20
c. 可能	60
d. 考慮	50
e. 不會	63
· _	200

## 4.1) Overall Marketing Strategy and Pricing

The pricing objective of the marketing BoF is profit-oriented, that means we are going to achieve target. We plan to set the market price of BoF at \$150, which means that customers will buy it at this price, as it is a new product raid into the market, \$100 is a price sufficient to create an image of trustful-technological product. At the same time, we expect the price we sell to retailers like mannings, Bonjour Cosmetics, Sasa Beauty, Fortress and Broadway is \$100, \$100 is enough for the retailers to absorb profit when they sell BoF to our target customers. As the product cost of BoF is \$62 that means we are going to earn about 61.3% of the intermediate price from the sales to retailers.

## 4.2) Sales Tactics

The distribution channel of us is that start off from the manufacturer producing the BoF, they will then be transported to our office, then after contacting retailers in HK, they will take the product by themselves, so the BoF will finally reach our target customers in the retail outlets of retailers.



The retailers we are going to distribute the product via which are large electrical appliances retailers like Fortress

## 4.3) Advertising and Promotion

The main promotion campaign used by us is personal selling, advertising and cooperation with cosmetic product retailers

### Cooperation with cosmetic product retailers

The market of BoF is connected to cosmetic products, we will try to cooperate to cosmetic retailers and offer a lower price or pack BoF into a special gift with other cosmetic products in package sold in discount. We want to establish an image that BoF is trustful and reasonable so we will convince retailers to put our product near the best-buy "pale" product.

### Advertising:

We planned to boost the name of BoF through out the territory, let the public knows what BoF is and how it is trustful. Therefore, the advertisement must be reaching the size of the public as large as possible. Therefore, we will use advertisement at the peak hours like 7:00pm to 10:00pm in MTR platform LCD TVs, besides, we will also use the largest outdoor broadcasting media- Roadshow to advertise BoF at the same time in order to reach as many as target customers as possible.

### Personal Selling

We planned to direct sale BoF. We will rent a counter or kiosk in shopping mall and cosmetic retails. The first and foremost reason is that we have a better understanding of the product, we can tell customer our product will help them. Latter, we will see where is a better selling point and then start to promote BoF there as a promotion location. We will not hire salesman in the first stage, this is for cost saving.

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## 5. Design and Development Plans

## 5.1) Development Status and Tasks

BoF is designed of present cosmetic market, which is lack of scientific person measurement instrument. The "pale" product is one of the fastest growing product in that market and consumers have to go to cosmetic center for skin analysis because the analysis requires large and complex instruments which is impossible for personal daily use, nevertheless, that is very expensive. The future development of BoF is targeting on this market opportunity.

The first BoF is skin color sensor and analysis, the analyzing procedure is driven by micro-computer. We are going to further improve the analyzer accuracy by continuous data integration. (that will be done by development procedure). The next generation of BoF should be built on a larger database and higher accuracy.

The size of personal device should be small size and lightweight,, obvious that, we will design a smaller and lighter device. We think, by using smaller components and multi-layers PCB, it is possible to further minimize the size and also the weight. The power supply of the first generation BoF is dry battery. Dry battery is an ideal power source for small power consumption device, however the weight is not too ideal. On the other hand, we are seeking a substitution, maybe carbon dry cell which lighter in weight, button cell, and even solar cell.

The other goal of next BoF is the functionality. We will integrate the most popular functions not only for skin color sensing but also personal care functions. E.g. the infrared thermometer, blood pressure meter, fat meter and ion distributor (air fresher).

The outlook is very important. We will pay some famous cartoon characters such as McDull,  $\underline{\Re}$  etc. then launch a series cartoon theme BoF. Furthermore, if the size of future BoF is small enough, we will change the shape to " $\underline{\Re}$ and add mirror in it.

## 5.2) Product Improvement and New Products

The first two years, we develop next BoF by using the operational expense, which is enough for developing a smaller design. In the same time, we use some part of advertising fund for cooperate with local cartoon characters, then the coming year we project BoF enter its maturity, we will add functions to BoF in order to sustain the sales.

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Year	Development plan
05	First BoF
	Smaller and core colorful, different shapes
	Printed with cartoon characters
06	Multi functions
	Infrared thermometer
	More memory
07	Further functions
	Blood pressure meter, fat meter

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## 6. Manufacturing

In this project of manufacturing 50000 sets of RGB Color Tone Sensor, the manufacturing cost is \$ 3,016,500.00 and the operating cost is \$ 59,750.00 which gives the total cost of \$3,106,250.00 and have the final unit prices of each device is \$62.13

The whole manufacturing process is divided into 4 parts that are PCB, PCBA, Casing and Final Assembly, the total production time among those four process is 1425.3 man-hours. During the process, the most time-taking procedures are electroplating and etching of the PCB board and the fabrication of mould.

With allocating the work process suitably by managing out man-hour in different workshop, the delivery data of the 50000 products is estimated about three months later.

### 6.1) Cost and Delivery Estimation Form

Project Name: RGB Color Tone Sensor

Prepared by: Tang-Paai Wong Dillian Data: 24/2/04

HK\$

#### A. Direct Materials Cost

Item No.	Material / Part Description	Qty	Unit	Unit Price (HK \$)	Amount (HK \$k)
1	Electronic components	50,000	Рс	31.72	1,586,000.00
2	Plastic Casing + Packaging	50,000	Рс	12.62	631,000.00
3	pcb	50,000	рс	8.00	400,000.00
		•		Sub-Total	2,617,000.00

#### B. Direct Labour Cost

Item No.	Material / Part Description	Unit Price (HK \$)	Qty	Amount (HK \$k)
1	Manufacturing/ Fabrication	1.9	50,000	95,000.00
2	Measuring / Inspection/ Test	0.49	50,000	24,500.00
			Sub-Total:	25,794.00

C. **Tooling Cost** (special tools, machines, jigs & fixtures used for this project)

Tools description : All machinery and tools for testing HK\$ 80,000.00

#### D. Factory Overhead Cost

Plastic & Metal Mould, Films

#### E. Manufacturing Cost (Factory Cost)

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200,000.00

FileN	ame: Manufacturing_BOF.Doc		
	Manufacturing Cost = $A + B + C + D$	нк\$ 3,016,500.0	00
F.	Operation Cost (Operating Expenses)		
	Operating Cost (say) = 50% of Direct Labour Cost = 0.5 x B	нк\$ 59,750.0	00
G.	Delivery Cost		
	Beijing to Hong Kong	нк\$ 30,000.0	00
H.	Total Cost		
I.	Total Cost = Manufacturing Cost + Operating Cost + Delivery Cost = E + F + G Unit Price	нк\$3,106,250.0	00
	Unit Price = Total Cost/ No. Of Product	HK\$ 62.1	13
J.	Estimated Delivery Date: 3.5 Month		
	* upon confirmation accepatance of quotation		

## 6.2) Operating Cycle

Project Name:	RGB Color Tone Sensor	Prepared by:	Tang-Paai Wong Dilllian
		Data:	24/2/04

Item	Product/ Process Description	Estimated man-hours
No.		
Α.	Process for PCB	113.95 days
	Preparation of artworks & films	8 hrs
	Hole Drilling	333.75 hrs
	Silk screen printing of PCB layout	170 hrs
	Electroplating and etching	9 hrs
	Electroplating and etching	260 hrs
	Printing of Solder Mask & Marking	4.5 hrs
	Cut to size	2.97 hrs
	Forming of size	2.3 hrs
	Short & Open Test	7 hrs
В.	Process for PCBA	17.38 days
	Incoming inspection	15 hrs
	Component preparation	1.35 hrs
	Component insertion	47 hrs
	In-process inspection	10 hrs

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	Wave soldering & cleaning		11.5 hrs
	Touch-up		12 hrs
	Add-on		8.3 hrs
	Functional Test		9.5 hrs
	Final inspection		7 hrs
C.	Process for Casing		69.57 days
	Fabrication of Mould		160 hrs
	Injection Moulding (For Plastic Case	e)	70 hrs
	Forming(For metal Case)		87.5 hrs
	Silk screen printing		4.5 hrs
	Inspection		165 hrs
D.	Final Assembly		4.29 days
	Assembly PCBA to the case		11 hrs
	Functional Test		8 hrs
	Packaging		8 hrs
	Final inspection		3 hrs
		Total man-Days	203.61 days
		Total man-Hours	1425.3 hrs

## **Estimated Duration:**

Total man-Days \* 0.5 = 101.81 days

## 6.3) Manufacturing Company:

KGS Technology Ltd. Workshop No.30, 10/F, Corporation Park, 11 On Lai Street, Shatin, N.T. Hong Kong Website: http:// <u>www.kgs.com.hk</u> E-mail: chriswong@kgs.com.hk Tel (852) 2637 1886 Fax (852) 2646 6834 Factory: Beijing KDS Electronic Co. LTd

Advanced Avionics Ltd Office: Block A, 12<sup>Th</sup> Floor, sunrise industrial building, 10 Hong Man Street, Chai Wan, Hong kong Warehouse: Block B, 18<sup>th</sup> Floor, sunrise industrial building, 10 Hong Man Street, Chai Wan, Hong Kong Website: <u>http://www.ApexHk.com</u> E-mail: aai@ApexHk.com Tel (852) 2889 1670 Fax: (852) 2889 2493

Welleader C0 Ltd Flat 14-15 12/F Wah Shing Centre 11-13 Shing tip St Kwun Tong, Kowloon HONG KONG

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*FileName: Manufacturing\_BOF.Doc* websitel : <u>http://www.faradnet.com/</u> E-mail: webmaster@FaradNet.com Tel: 85-2-23426189 Fax: 85-2-23430201

TS Creative LTD Address : 6/F Cheung Fai Industrial Building,133 Wai Yip Street,Kwun Tong, Kowloon,Hong Kong Website : <u>http://www.toysolution.com/</u> Email : sales@toysolution.com Tel : (852) 2342-0093 Fax : (852) 2342-2090

## FileName: CriticalRisksAndSWOTAnalysis\_BOF.doc 7. Critical Risks, and SWOT (specific) Analysis

## 7.1) Critical Risks

After conducting field-marketing research, we discovered that there are no close substitutes of BoF available in Hong Kong, that means there is no product with similar function in the personal care market. Admittedly, there are few portable personal skin care products that help to measure skin. They are

- 1) Skin Color Balance Sensor (e.g. Japan S-Color)
- 2) Moisture & Sebum Sensor (e.g. LaPrope)

But we have analyzed several competitive criteria which can compare their competitiveness in the following table.

	Skin Color Balance	Moisture & Sebum	Bright on Faith
	Sensor	Sensor	
Storage ability	No	No	Yes
Testing sample	Hemoglobin	Moisture	Triplet RGB color
	Melanin	Sebum	on skin
Price	\$250(retail)	\$500(retail)	\$150(retail)
			\$100(wholesale)
Resolution	12	225	10million
display Interface	Few LEDs	5 digits numeric LCD	8x4 ASCII
		display	character B/W
			LCD display

As BoF is more trustful as its high resolution, and it measured data (RGB components) is more direct measurement for our human vision on skin color tone. Moreover, it's LCD display is able to show sentences that makes the analyzed data more comprehensive.

## 7.2) SWOT(specific) Analysis

Strengths:

- As the production is using existing technology, it can be produced at low cost and it need very less development at the beginning stage.
- The product is user friendly and most of procedure is completed by internal microcomputer. By reading on the LCD display everyone can use it without long time learning.
- The high resolution and the storage capacity of BoF are great advantages than the other near products.
- By changing the program inside the microcomputer, the more functions on BoF can be added easily on further development.
- BoF is small size (cell phone size) and colorful that are attractive to young people.
- Power consumption is low, BoF can operate long time without replacing battery.

Weaknesses:

#### FileName: CriticalRisksAndSWOTAnalysis\_BOF.doc

- BoF is very high resolution, we need much more statistic data on skin color that help us to tune BoF accurately. And the data now we setup in our database may not enough, so that a series of survey may need to be conducted
- Self-calibration is needed on BoF every time used that use extra time.
- The internal 2kbtyes flash memory is not enough for long term trace of change on skin color tune.

## Opportunity:

- We find that there is not such similar product existing in the market, that means there are still many opportunities for its growth. Our product is on microcomputer base so the design is upgradeable for the further equipments in the market.
- Greater market potential can be reached after we improve the appearance, that is, we printed cartoon characters on BoF. Actually, this require further investment and we will implement it after first stage revenue.
- The market of cosmetic products is growing rapidly, number of "pale" product user will rise. The BoF market will further grow.

### Threats:

- Our technology can be easily imitated by other company and then push into the market.
- As our one our target markets is the aged 15~23 female, the price of BoF cannot be too high because their income normally no enough to afford.

## 7.3) <u>Contingencies Measures</u>

- We can try to find out potential entrepreneurship fund offered by the Government and obtain loan from banks or investors.
- We will, if possible, use the profit earned for paying cartoon character printing copyright.
- Use larger storage capacity flash memory that is suitable for year long data storage.
- Try to seek partnership as joint venture to entry Mainland China market.
- We will try to educate public to use trustful device to gain objective data rather than using subjective measurement.
- We will also apply patent which last for 5 years so that others cannot copy the product, by the way, we will try our best to publicize it so that people recognize it as a trustful device.

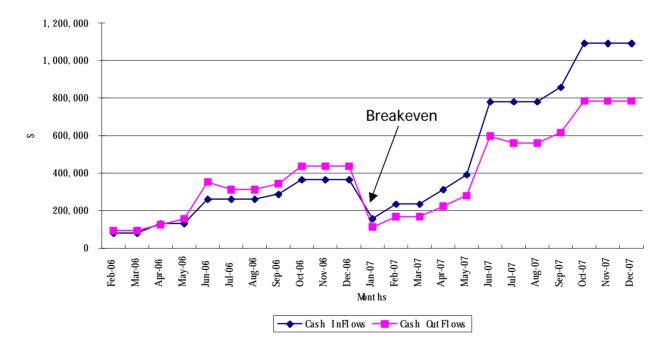
## FileNeme: FinancialPlan\_BOF.Doc 8. Financial Plan

## 8.1) Breakeven Analysis

All stocks will be sold by retailers as we sell BoF to them on their request, that's why we keep no inventory.

At the very beginning, we have to use \$701,160 for the investment of the first season, as we project \$335,336 sales revenue for the following 24 months, therefore, we need about 8 million as initial fund, then we would produce by using the revenue over gained by the last months so that the initial fund need not be so large as the production cost shown in the profit and loss account. When it comes to the sources of funding, we will mainly contribute by partners of the company and bank loan. On the other hand, we assume the stocks bought by each retail outlets for the 1<sup>st</sup> to 4<sup>th</sup> seasons are 1000, 1500, 200 and 4500 respectively. The stocks increase tremendously because we have continuously using television and Roadshow to advertise and we expect, estimated by market research, that about 9095 people will buy the product in the first year because 3.5% people say that they will buy and 10% people say that function is the most important. After calculation, we attained a net profit of \$335336 with sales of \$909510.

We also anticipated that the breakeven point will be achieved at the 12<sup>th</sup> months after the initial fund has been used to produced and run the business.



## Breakeven Analysis

## FileNeme: FinancialPlan\_BOF.Doc 8.2) Bright & Charming Income Statement

## Bright & Charming Income Statement

	2005
NET SALES	909,510
COGS	574,174
Gross Margin	335,336
Operating Cost	
Development	417,530
SG&A	224,870
Other	31,210
Total Operating Costs	673,610
Operating Earning	-338,274
Interest Expense	-24,110
Pretax Earning	-362,384
Income Tax	0
Net Income	-362,384

## 8.3) Bright & Charming Balance Sheet

# Bright & Charming Balance Sheet 31-Dec-05

ASSETS Cash Accounts Receivable Inventory Prepaid Expenses Other Current Assets Total Current Assets	360,000 118,530 7,870 27,960 11,160 525,520
Fixed Assets	175,640
Intangibles	1
Other Noncurrent Assets	<u>0</u>
Total Assets	<b>701,160</b>
LIABILITIES Notes Payable Accounts Payable Interest Payable Taxes Payable Other current Liabilities Total Current Liabilities	76,230 22,740 7,830 6,520 15,840 <b>129,160</b>
Long-term Debt	0
Other Noncurrent Liabilities	<u>21,210</u>
Total Liabilities	150,370
Net Worth	550,790

FileNeme: FinancialPlan\_BOF.Doc

Total Liabilities & Net Worth 701,160

Note to balance sheet: Assets included \$360,000 in cash from the founder's \$800,000 initial capitalization

**Bright & Charming Cash Flow Statement** 

## 8.4) Bright & Charming Cash Flow Statement

31-Dec-05	iow statement
Sources of Cash	
Sales	909,510
Total Cash In	909,510
Uses Of Cash	
COGS	574,174
SG&A	176,520
Other	57,960
Interest	14,250
Taxes	0
Equipment Purchase	273,200
Total Cash Out	1,096,104
NET CHANGE IN CASH	-186,594
Beginning Cash On Hand	372,010
Ending Cash On Hand	185,416
-	

## 8.5) Bright & Charming Pro Forma Income Statement

## Bright & Charming Pro Forma Income Statement

INCOME PROJECTION				
	2006	2007	2008	2009
INCOME				
Net Sales	2,598,600	7,795,800	6,496,500	3,897,900
Cost Of Sales	1,312,397	3,937,191	2,296,695	1,378,017
Gross Profit	1,286,203	3,858,609	4,199,805	2,519,883
OPERATING EXPENSES				
General & Administrative Expenses				
Salaries And Wages	286,000	391,259	525,938	525,938
Sales Commissions	38,586	115,758	125,994	75,596
Rent	280,000	280,000	280,000	280,000
Maintenance	22,750	13,390	14,060	14,760
Furniture And Equipment Purchase	100,000	37,000	30,000	30,000
Insurance	15,200	15,960	16,760	19,990
Interest Expenses	12,500	15,960	12,130	12,740
Utilities	11,000	11,550	12,130	12,740
				8-3/3

FileNeme: FinancialPlan_BOF.Doc				
Office Supplies	6,500	8,260	21,770	9,770
Marketing And Advertising	1,001,500	655,000	800,000	900,000
Travel	105,000	125,000	150,000	175,000
Entertainment	6,000	3,010	4,260	5,550
Bad Debt	5,000	1,910	5,260	3,230
Depreciation And Amortization	18,000	27,000	40,500	60,750
TOTAL OPERATIN EXPENSES	1,908,036	1,701,057	2,038,802	2,126,064
Net Income Before Taxes	-621,833	2,157,552	2,161,003	393,819
Provision For Taxes On Income	0	431,510	432,201	78,764
NET INCOME AFTER TAXES	-621,833	2,589,062	2,593,204	472,582

*Notes to income projections:* Sales projections reflect assumptions of progressively greater rollout into the national market, with accordingly higher levels of sales. Heavy first-year marketing expenses level off as national distribution is achieved. Sales increase in subsequent years as the effect of initial marketing efforts is felt. Wage and salary increases reflect need to hire additional salespeople and administrative personnel to cope with sales.

Sustained profitability is achieved in 2007. Projected income tax reflects effects of applying net operating loss only the prior years

## 8.6) Bright & Charming Pro Forma Balance Sheet

	2005	%Sales	2006 (Projected)
Sales	909,510		2,598,600
ASSETS			
Cash	360,000	39.6%	1,028,571
Accounts Receivable	118,530	13.0%	338,657
Inventory	7,870	0.9%	22,486
Prepaid Expenses	27,960	3.1%	79,886
Other Current Assets	11,160	1.2%	31,886
Total Current Assets	525,520	57.8%	1,501,486
Fixed Assets	175,640	19.3%	501,829
Intangibles	1	0.0%	0
Other Noncurrent Assets	0		0
Total Assets	701,160		2,003,314
LIABILITIES			
Notes Payable	76,230	8.4%	217,800
Accounts Payable	22,740	2.5%	64,971
Interest Payable	7,830	0.9%	22,371
Taxes Payable	6,520	0.7%	18,629
Other current Liabilities	15,840		16,710
Total Current Liabilities	129,160		340,481

### Bright & Charming Pro Forma Balance Sheet

FileNeme: FinancialPlan_BOF.Doc			
Long-term Debt	0		0
Other Noncurrent Liabilities	21,210	32,220	
<b>Total Liabilities</b>	150,370	372,701	
Net Worth	550,790	1,630,613	
Total Liabilities & Net Worth	701,160	2,003,314	

Note to balance sheet projection: Balance sheet projections were based on relationships between various items items reflected in 2004 actual results. Intangibles include goodwill, proprietary technology and long-term service and maintenance contracts.

## 8.7) Bright & Charming Pro Forma Cash Flow Statement

**2006** Bright on Failth Cash Flow Statement

Projected Cash Flow: 2006	Jan	Feb	Mar	Арг	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
%Sales	Jan 2.0%	3.0%	3.0%	4.0%	5.0%	10.0%	10.0%		зер 11.0%				100.0%
CASH RECEIPTS													
Income From Sales													
Sales	51,972	77,958	77,958	103,944	129,930	259,860	259,860	259,860	285,846	363,804	363,804	363,804	2,598,600
Total Cash From Sales	51,972	77,958	77,958	103,944	129,930	259,860	259,860	259,860	285,846	363,804	363,804	363,804	2,598,600
Financing Income													
Net OfferingProceeds	4,330,000	0	0	25,000	0	0	0	0	0	0	0	0	4,355,000
Interest Income	3,500	3,500	2,500	2,500	2,000	1,750	1,750	1,500	1,500	1,500	1,250	1,250	24,500
Total Cash Receipts	4,385,472	81,458	80,458	131,444	131,930	261,610	261,610	261,360	287,346	365,304	365,054	365,054	6,978,100
CASH DISBURSEMENTS													
Expenses													
cogs	26,248	39,372	39,372	52,496	65,620	131,240	131,240	131,240	144,364	183,736	183,736	183,736	1,312,397
SG&A	36,161	54,241	54,241	72,321	90,402	180,804	180,804	180,804	198,884	253,125	253,125	253,125	1,808,036
Equipment Purchase	60,000	. 0	. 0	. 0	. 0	40,000	. 0	. 0	. 0	. 0	. 0	. 0	100,000
Dividends	. 0	0	0	0	0	. 0	0	0	0	0	0	0	0
Total Cash Disbursements	122,409	93,613	93,613	124,817	156,022	352,043	312,043	312,043	343,248	436,861	436,861	436,861	3,220,433
Net Cash Flow	4,263,063	-12,155	-13,155	6,627	-24,092	-90,433	-50,433	-50,683	-55,902	-71,557	-71,807	-71,807	3,757,667
Opening Cash Balance	185,416	4,448,480	4,436,325	4,423,170	4,429,796	4,405,705	4,315,271	4,264,838	4,214,155	4,158,253	4,086,697	4,014,890	3,943,083
Cash Receipts	4,385,472	81,458	80,458	131,444	131,930	261,610	261,610	261,360	287,346	365,304	365,054	365,054	6,978,100
Cash Disbursements	-122,409	-93,613	-93,613	-124,817	-156,022	-352,043	-312,043	-312,043	-343,248	436,861	436,861	-436,861	-3,220,433
Ending Cash Balance	4,448,480	4,436,325	4,423,170	4,429,796	4,405,705	4,315,271	4,264,838	4,214,155	4,158,253	4,086,697	4,014,890	3,943,083	

#### 2007

Bright on Failth Cash Flow Statement

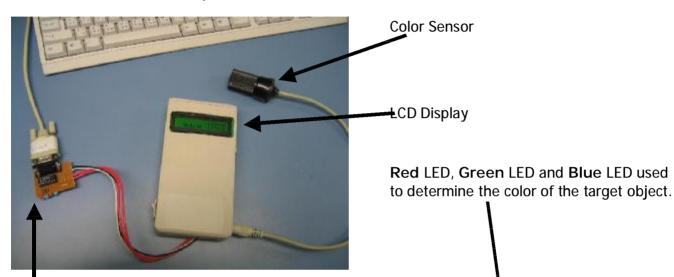
Projected Cash Flow: 2007				_					_	_		_	
%Sales	Jan 2.0%	Feb 3.0%	Mar 3.0%	Apr   4.0%	May 5.0%	Jun 10.0%	Jul 10.0%	Aug 10.0%	Sep 11.0%	Oct 14.0%		Dec 14.0%	TOTAL 100.0%
,.eaice	2.070	0.070	0.070	4.070	0.070	10.070	10.070	10.070	11.070	14.070	14.070	14.070	100.070
CASH RECEIPTS													
Income From Sales Sales	155,916	233,874	233,874	311.832	389,790	779,580	779,580	779,580	857,538	1,091,412	1,091,412	1,091,412	7,795,800
Total Cash From Sales	155,916	233,874	233,874 233,874	311,832 311,832	389,790	779,580	779,580	779,580	857,538	1,091,412	1,091,412	1,091,412	7,795,800
Financing Income													
Net OfferingProceeds	0	0	0	0	0	0	0	0	4 500	0	0	0	0
Interest Income	1,200	1,000	1,200	1,500	2,000	1,750	1,750	1,500	1,500	1,500	1,250	1,250	17,400
Total Cash Receipts	157,116	234,874	235,074	313,332	391,790	781,330	781,330	781,080	859,038	1,092,912	1,092,662	1,092,662	7,813,200
CASH DISBURSEMENTS													
Expenses													
COGS	78,744	118,116	118,116	157 ,488	196,860	393,719	393,719	393,719	433,091	551,207	551,207	551,207	3,937,191
SG&A	33,281	49,922	49,922	66,562	83,203	166,406	166,406	166,406	183,046	232,968	232,968	232,968	1,664,057
Equipment Purchase	0	0	0	0	0	37,000	0	0	0	0	0	0	37,000
Dividends	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cash Disbursements	112,025	168,037	168,037	224,050	280,062	597,125	560,125	560,125	616,137	784,175	784,175	784,175	5,638,248
Net Cash Flow	45,091	66,837	67,037	89,282	111,728	184,205	221,205	220,955	242,901	308,737	308,487	308,487	2,174,952
Opening Cash Balance	3,943,083	3,988,174	4,055,011	4,122,047	4,211,330	4,323,057	4,507,262	4,728,468	4,949,423	5,192,323	5,501,061	5,809,548	6,118,035
Cash Receipts	157,116	234,874	235,074	313,332	391,790	781,330	781,330	781,080	859,038	1,092,912	1,092,662	1,092,662	7,813,200
Cash Disbursements	-112,025	-168,037	-168,037	-224,050	-280,062	-597,125	-560,125	-560,125	-616,137	-784,175	-784,175	-784,175	-5,638,248
Ending Cash Balance	3,988,174	4,055,011	4,122,047	4,211,330	4,323,057	4,507,262	4,728,468	4,949,423	5,192,323	5,501,061	5,809,548	6,118,035	

8-5/5

FileName: HardwareDemonstration\_BOF.doc

## 9. Hardware Demonstration

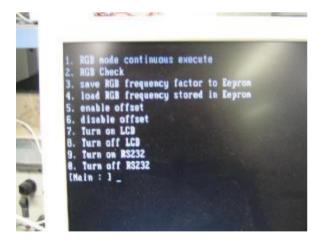
The following will demonstration the usage of the device "Bright on Faith" (RBG color tone sensor). Say how to use it to measure the skin color index, what will be displayed on the LCD.



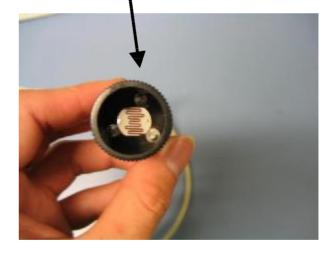
## 9.1) General View of the product

Bright on Faith

## PC adaptor

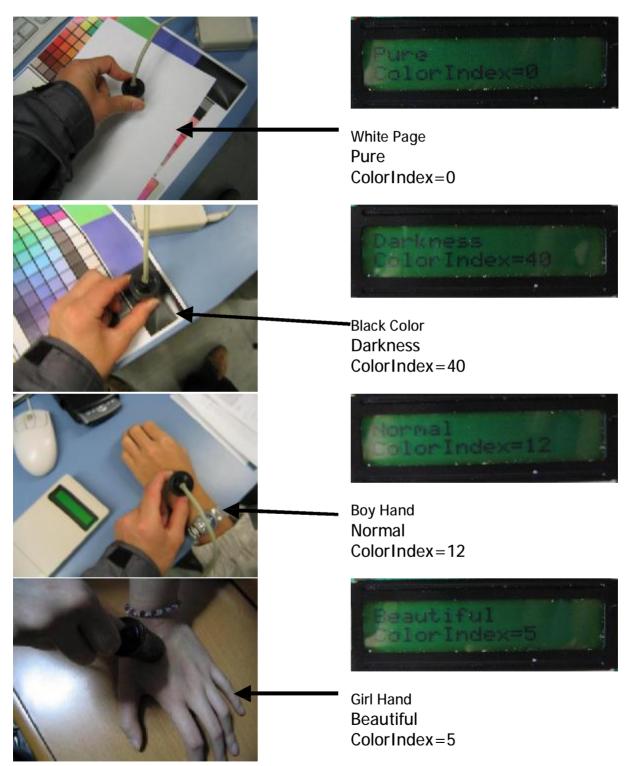


In the development process, we use computer to calibrate the RBG sensor



# *FileName: HardwareDemonstration\_BOF.doc* 9.2) <u>Using Examples</u>

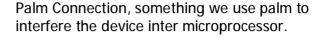
Place a probe, tightly close the target skin, after several second, the LCD will display the result that represent the skin color index.



# FileName: HardwareDemonstration\_BOF.doc 9.3) Development process

Following illustrate parts of the development process.





Because the device have memory capability, we change the internal setting can change it measurement response.



Calibration, we place the probe in difference color target. Difference color will give the differences index values.

Therefore, We set the equation and the lookup tables for the identification of the color index of the target.

