## SME Development Fund (SDF)/ **Dedicated Fund on Branding, Upgrading and Domestic Sales (BUD Fund)** (Organisation Support Programme) (OSP)

## **Final Report on Approved Project**

Project ref. no.

: D16 002 008

Project title

: To enhance the overall competitiveness of Hong

Kong SMEs by upgrading SMEs' 3D printing

technology in a sustainable way

Period covered

: From 01/01/2017 to 30/06/2018

(dd/mm/yy) (dd/mm/yy)

#### 1. Project Details

(Please mark with "\*" if any of the following project details is different from that in the project proposal appended to the project agreement.)

#### Project Summary (in about 150 words)

Even though 3D Printing technology not yet fully replaces all manufacturing procedures, introduction of this technology has revolutionized the manufacturing process of many major industries. Facing a great cost reduction throughout the decades, 3D Printing machines is penetrating to the sectors of SMEs and household users. With the ease of operation, everyone can become designers. This technology is popularized and stimulates users' creativity in product design. With the ease in adaptation of 3D Printing technology in SMEs' operation and the breakthrough of limitations in product design, Hong Kong SMEs could no doubt enhance their competitiveness in the tide of the third industrial revolution. To capture the opportunities, a number of activities could be launched to linkup the industry stakeholders, enhance their awareness and strengthen their capability in utilizing 3D Printing technology.

#### Project Objective(s) (in about 80 words)

- -To promote the awareness of industrial application of 3D Printing technology in Hong Kong SMEs under different industry sectors on high value added and mass customization products.
- -To bridge up Hong Kong SMEs with the leading 3D Printing application technology
- -To provide opportunities for Hong Kong SMEs to train up and upgrade their professionals in 3D Printing modelling skills for the industrial application.

#### Grantee/Collaborating Organisation/Implementation Agent

Grantee : Hong Kong 3D Printing Association Limited

: Hong Kong Federation of Innovative Technologies and Manufacturing

Industries Limited

Diamond Federation of Hong Kong China Limited Hong Kong Optical Manufacturers Association Limited Hong Kong Intimate Apparel Industries' Association Limited

The Hong Kong Federation of Restaurants and Related Trades Limited

The Federation of Hong Kong Footwear Limited Hong Kong Construction Materials Association Limited

Hong Kong Foundry Association Limited Hong Kong Designers Association Limited

Collaborating Organisation(s) Hong Ko

Hong Kong Electrical Appliance Industries Association Limited

Implementation Agent(s) : Hong Kong Productivity Council

#### **Key Personnel**

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		Name	Company/Organisation	Fax No.
Project Co-ordinator	:	Ms Wai Yin SIN, Ami	Hong Kong 3D Printing Association Limited	24651271 & 24545178
Deputy Project Co-ordinator	:	Ir Kwok Wai SUEN, Samson	Hong Kong Productivity Council	27885552 & 27885522

#### **Project Period**

As stated in project agreement	Commencement Date (day/month/year) 01/01/2017	Completion Date (day/month/year) 30/06/2018	Project Duration (No. of months)
Revised (if applicable)			

#### **Summary of Project Results** 2.

#### **Project Deliverables**

(Please list out the project deliverables as stated in the project proposal appended to the project agreement and provide details related to the actual result achieved for each of them.)

	Project deliverable	Quantifiable target number (e.g. 100 participants)	Actual result achieved (e.g. 90 participants)	Reasons for not achieving the target, if applicable (e.g. The total number of registered participants was over 120. However, some of them did not show up eventually. Will strengthen promotion and try to make up for the shortfall in the following two seminars.)
a)	A project website	N/A	N/A	
b)	An half-page advertisement on newspaper	N/A	N/A	
c)	1st seminar – Building & construction, Food & beverage	140	160	
d)	1st workshop - Food & beverage	40	34	The total number of registered participants was 40. However, some of them didn't show up eventually. It is confident that with more promotion, the shortfall could be made up in the coming 4 workshops.
e)	2nd workshop – Building & construction	40	42	
f)	2nd seminar – Toy, game & premium gift, Houseware	140	154	
g)	3rd Workshop – Houseware	40	40	
h)	4th Workshop – Toy & game & premium gift	40	40	
i)	3rd Seminar – Jewellery + Eyewear + Fashion + Footwear	140	309	
j)	5th Workshop — Jewellery	40	46	
k)	6th Workshop – Footwear	40	46	
1)	7th Workshop – Eyewear	40	44	
m)	8th Workshop – Fashion	40	42	

# Details of the deliverables (e.g. date, duration, venue, speaker, topic discussed, etc.) (Please list out in table format if necessary.)

	Project deliverable (e.g. First seminar)	Date	Duration	Venue	Speaker	Topic discussed
a)	A project website	13 Apr 2017 (website launch date)	N/A	Website: www.3dpfo rhksme.co m	N/A	N/A

b)	An half-page advertiseme nt on	27 Mar 2017	N/A	Published on Metro	N/A	N/A
c)	newspaper First seminar — Building & construction, Food & beverage	24 Apr 2017	6 hrs	Daily Theatre 3, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Prof. Christopher Tuck,     Professor of Materials     Engineering, Faculty of     Engineering, The     University of     Nottingham      Mr. Ronald Rael,     CEO, Emerging     Object	1. Development, technology and industrial application of 3D printing  2. 3D Printing successful application case in Building & construction
					3. Ms. Melissa E Snover, Managing Director, Katjes-Magic Candy Factory	3.3D printing successful application case in Food & beverage industry
					4. Mr. Billy Wong , Senior BIM/AEC Technology Manager, Gammon Construction	4.3D printing application experience sharing by local industry — Building &
	W				5. Mr. Sidney Tang, Architect	construction industry
- September 1					6. Mr. Michael Wong, Manager of Strategic Marketing & Business Development, Welfare Electronic Components Limited	5.3D printing application experience sharing by local industry – Food & beverage
					7. Mr. Chuck Fung, Senior Consultant, Hong Kong Productivity Council	- industry
d)	First workshop - Food & beverage	19 May 2017	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	<ol> <li>Mr. Michael Wong, Manager of Strategic Marketing &amp; Business Development, Welfare Electronic Components Limited</li> <li>Mr. Chuck Fung, Senior Consultant, Hong Kong Productivity Council</li> </ol>	3D Printing application in local Food & beverage industry
e)	Second workshop – Building & construction	23 Jun 2017	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr Armin Veitl,     Technical Director for     Service and Support,     Altair China (note a)	3D printing application in Building & construction industry

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f)	Second seminar – Toy, game & premium gift, Houseware	15 Sep 2017	6 hrs	Theatre 3, HKPC Building, 78 Tat Chee Avenue, Kowloon,	1. Prof. Joshua M. Pearce, Professor, Materials Science & Engineering and Electrical & Computer Engineering, Michigan Technological University	Development, technology and industrial application of 3D printing
				Hong Kong	2. Mr. James Fleet Hower, Creator, LockNesters	2. 3D printing successful application case in Toy, game & premium gift industry
		*			Mr. Peter Donders,     Belgian artist and     furniture designer	3. 3D printing successful application case in Houseware industry
					4. Mr. Ng Hoi Chun, Steve, Director, Toyeast Limited	4. 3D printing application experience sharing by local industry - Toy, game & premium gift industry
- 20					5. Mr. Yip Sze Ming, Harris, Project Manager, Double H Industrial & Technology Limited 6. Mr. Steven Ma, Founder and Chief Designer, Xuberance Design Inc	5. 3D printing application experience sharing by local industry - Houseware industry
g)	3rd Workshop – Houseware	10 Oct 2017	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr. Yip Sze Ming, Harris, Project Manager, Double H Industrial & Technology Limited	3D Printing application in local houseware industry
h)	4th Workshop – Toy & game & premium gift	16 Nov 2017	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr Wong Yuk Founder, Apostrophe's Co. Ltd	3D Printing application in local toy & game & premium gift industry
i)	3rd Seminar – Jewellery + Eyewear + Fashion + Footwear	7 Mar 2018	6 hrs	Conference Hall, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Dr. Mike Fralix CEO of [TC] <sup>2</sup> Dr.Lionel Dean Senior Lecturer, School of Design, De Montfort University (DMU), Leicester, UK.	Development, technology and industrial application of 3D printing Latest 3D Printing technology development

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					Mr. Todd Blatt Founder of Custom 3D Stuff LLC	Innovative & unique applications and methodology of 3D Printing
					Dr. George Michael Vasquez Founder of 3Degrees	Difference and similarities of the methodology adopted by foreign enterprises and HK SMEs
					Mr.Eddie Lai Founder of Forever Couple	3D printing application experience sharing by local industry – Jewellery industry
					Mr. Ameber Leung Founder of No Concept Limited	3D printing application experience sharing by local industry – Footwear industry
	a a	-			Mr. Edmond Wong Founder and Chief Designer of ITUM	3D printing application experience sharing by local industry – Eyewear industry
- 10					Mr. Zac Leung Founder to Portion Studio Limited	3D printing application experience sharing by local industry — Fashion industry
j)	5th Workshop – Jewellery	26 Mar 2018	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr. Clement Chan Director of Yuen Kee Ho Machinery Ltd	3D Printing application in local jewellery industry
k)	6th Workshop – Footwear	20 Apr 2018	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr. Ameber Leung Founder of No Concept Limited	3D Printing application in local footwear industry
1)	7th Workshop – Eyewear	11 May 2018	8 hrs	Room 112, HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong	Mr. Edmond Wong Founder and Chief Designer of ITUM	3D Printing application in local eyewear industry
m)	8th Workshop – Fashion	15 Jun	8 hrs	Room 112, HKPC Building, 78 Tat Chee	Mr. Zac Leung Founder to Portion Studio Limited	3D Printing application in local fashion industry

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				Avenue, Kowloon, Hong Kong		
n)	An half-page advertiseme nt on newspaper	27 Jun	N/A	Published on Metro Daily	N/A	N/A

### Milestones (in chronological order)

(# Please indicate if the milestone is completed (C), deferred (D) or not achieved (N). If it is deferred, please indicate the revised completion date. For those milestones which are deferred or not achieved, please also provide the reasons under item 2.4.)

Milestone (as set out in the approved project proposal appended to the project agreement)	Original target completion date	Revised <u>completion</u> <u>date</u> (if applicable)	Status (C/D/N)#
<ul> <li>To launch the 1st half-page advertisement on newspaper</li> </ul>	31 Mar 2017	13 Apr 2017	D
<ul><li>To launch project website</li><li>To identify venue and potential speakers for seminars and workshop</li></ul>			
To design and produce leaflet of the 1st (a) seminar			
- To organize the 1st seminar for Building & construction and Food & beverage industries	30 Apr 2017	24 Apr 2017	С
To design and produce leaflet of the 1st (b) seminar			
<ul> <li>To organize the 1st and 2nd workshops for Building &amp; construction and Food &amp; beverage industries</li> </ul>	30 Jun 2017	19 May 2017 23 Jun 2017	С
- To design and produce leaflet of the 2nd (c) seminar			
- To organize the 2nd seminar for Toy, game & premium gift and Houseware industries	30 Aug 2017	15 Sep 2017	D
- To design and produce leaflet of the 3rd (d) and 4th workshops			
- To organize the 3rd and 4th workshops for Toy, game & premium gift and Houseware industries	31 Oct 2017	20 Oct 2017 16 Nov 2017	D
- To design and produce leaflet of the 3rd (e) seminar			
- To organize the 3rd seminar for Jewellery, Eyewear, Fashion and Footwear industries	31 Jan 2018	7 Mar 2018	D
- To design and produce leaflet of the 5th & 6th workshop	31 Mar 2018	26 Mar 2018 20 Apr 2018	D
- To organize the 5th & 6th workshops (g) for Jewellery, Eyewear,			
<ul> <li>To design and produce leaflet of the 7th &amp; 8th workshop</li> <li>To organize the 7th &amp; 8th Fashion and Footwear industries</li> </ul>	31 May 2018	11 May 2018 15 Jun 2018	D
- To launch the 2nd half-page advertisement on newspaper - To finalize the information on the website	30 Jun 2018	27 Jun 2018	С

Future Plan for Promoting	the Project Deliverables (Nil if not applicable)	
N/A		

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