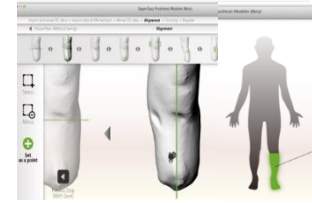


## 基礎調査

## フィリピン国 3Dプリント義足製作ソリューション事業にかかる基礎調査

## 企業・サイト概要

- 提案企業：株式会社SHCデザイン
- 企業所在地：神奈川県横浜市
- サイト：フィリピン国(メロマニラ、イロイロ州)



## フィリピン国の開発課題

- 栄養状態の劣悪さから糖尿病に罹患して膝下切断処置を受ける義足適合患者の数が多
- 義肢装具士、義足提供クリニックの不足から、貧困層が義足を入手・交換することが難しい

## 中小企業の製品・技術

- 3Dプリンタおよび3Dプリンタ用の義足デザイン、3Dモデリングソフトウェアを独自開発
- 非常に簡易に義足製作を行える、低価格の義足製作用3Dソリューション
- 患者の健足そっくりの美観を備える完全オーダーメイド、軽量で身体負担が少ない

## 日本の中小企業の事業戦略

- 前例がなく競合他社のない本提案製品のパイオニア的展開は、世界義足市場での強固な市場優位性・高い認知度・ブランド力の獲得、事業収益拡大・安定化につながる
- 途上国での収益獲得により、本提案製品を膝下足以外の部位の義足・義手など他の装具製作にも対応できる機能向上のための開発費を確保したい

## 中小企業の事業展開を通じて期待される開発効果

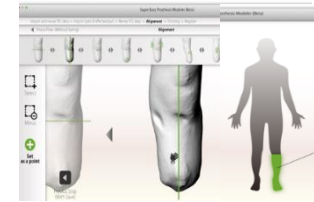
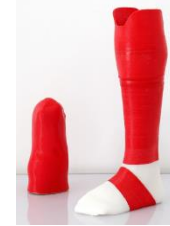
- 義肢装具士のトレーニング期間や、1本あたりの義足製作時間を削減。大げさな機械加工設備なしに義足提供クリニックの設立が可能になる
- 障害者/足切断患者は、美観をそなえた身体的負担の少ない義足を、従来品の義足の半額以下で入手できる
- 義足適用患者の3分の1は義足装着により生産労働への従事が可能となると見込める

# SME Partnership Promotion

## Philippines Survey on 3D Printed Prostheses Solution

### Company and site summary

- Proposed Company: SHC Design Co., Ltd.
- Location: Yokohama City, Kanagawa Prefecture
- Site: Republic of the Philippines (Metro Manila, Iloilo Province)



### Development challenges of the Philippines

- A large number of patients with poor nutrition suffer from diabetes and receive a trans tibial (below-knee) amputation treatment
- It is difficult for the poor to get or exchange Prostheses, because of the lack of Prosthetist and Prosthetic clinic.

### Products and technologies of the company

- Prostheses design, 3D printer and 3D modeling software special for them
- 3D solutions that can be manufactured prosthetic legs in a simple and low-cost
- The original development of 3D below-knee 3D prostheses are completely made-to-order, good-looking like the existing leg, less body-burden at light weight

### Business strategy of the company in Japan

- Pioneering expansion of 3D solutions without competitors or precedent means acquisition of strong market advantage, high name recognition, brand power in the world prosthetic leg market. It leads to operating revenue expansion and stabilization.
- By revenue generation in developing countries, we would like to ensure the development costs for the further features which can be applied such as other parts of leg or arm than below-knee.

### Development effect to be expected through the business development of the company

- 3D solutions would reduce the training period of prosthetists and prosthesis fabrication time per one. They also would enable to establish the prosthetic clinic without grandiose machining facilities.
- People with disabilities / Leg amputees could get good-looking and less-burdened prostheses at less than half costs of a conventional prosthetic leg.
- A one-third of patients might participate production labor by wearing prosthetic leg.