Commercial Skills for Chemists:
Market Research
ShinyTeeth Case Study

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Marketing Case Study - Shiny Teeth Ltd

Shiny Teeth Ltd

- Two inventors have devised a novel way of making all-ceramic replacement teeth
- Most replacement teeth have metal cores; all-ceramic ones are expensive and time consuming to make and not approved by the NHS
- Ceramic cores have several advantages over metal cores, including durability, colour and non-toxicity
- The inventors have combined automated furnaces, CAD/CAM, and materials science into an ‘instrument set’ that transforms the making of teeth from a craft into a potentially large scale process
- We have been asked to estimate the market for their instrument set and advise on their business model
The Market

• 3000 dental laboratories
• produce 2m teeth in the UK every year for 25000 dentists

• 30% (600k) of teeth are produced for private patients and are usually ceramic
• Each ‘Shiny Teeth’ instrument set can make 30,000 teeth per year
• So, the inventors believe that the potential market for their machine in the UK is 600k/30k = 20 sets. Are they correct?

Distribution of Customer Size

• There are 2000+ small labs making 50-200 teeth pa
• Dental labs sell teeth to dentists for about £50 each

• There are around 600 big labs making over 1000 ceramic teeth pa
Facts and Figures

• 1 skilled dental technician can make 200 teeth per year by current methods
• 1 dental technician can make 5-6000 teeth per year with 'Shiny Teeth' instrument set
• 1 technician's salary is £15,000 to £25,000
• Shiny Teeth Instrument set costs £15,000
• Instrument set needs annual servicing, consumes highly pure raw materials (silica)
• It takes an accountant about 2 hours (at about £100/hour) to prepare, check, print, post, and record an invoice

Questions for Shiny Teeth

• Do we set up our own dental lab?

• Or do we sell instruments to dental labs?

• Or are there other ways of ‘doing business’?

• The way to start this problem is to consider how many customers (dental labs) would benefit from buying a ‘Shiny Teeth’ instrument set?