MEMO

TO: Employees of Savatica Jewelry

FROM: Rachel Bolt, CEO

DATE: APRIL 2, 2016

SUBJECT: Introducing 3D Printers

As the team requested on January 1st, this report organizes the results of my research regarding the potential benefits, opportunities and concerns with the investment of a 3D printer.

Over the last six months, our ring sales have dropped by 15%, and necklace and bracelet sales are up 2% overall. During these months, we have noticed our customer commitment has also decreased. In recent surveys, clients have mentioned that they are looking for new innovative ways to customize their jewelry. Additionally, our labor costs are higher than overseas competitors and human error is contributing to a high volume of waste.

My investigation began when the idea of 3D printing was acknowledged in our work place during our monthly meeting. I first learned about 3D printing machines and what they are capable of. I then dove further by analyzing multiple businesses currently utilizing 3D printers to produce jewelry and accessories.

The decline in sales of rings stem from two problems: (1)more consumer customization

and (2) high labor costs in combination with high waste.

CUSTOMIZATION PROBLEMS

Last year when we decided to do name bracelets and healing necklaces, we adopted an approach based much more around customization than in the past. Since the addition of our customizable bracelets and necklaces, the number of repeat customers has doubled.

However, the newfound accessibility we gave our customers for customization, led them to yearn for more options. Now, our customers are opting to spend their money at jewelry businesses that project innovation and originality, often established with the help of a 3D printing device.

For example, often times we customize the stones on a customer's bracelet to coincide with their children's birthstones. However, if a customer wants the stone in a different shape or setting, we cannot always provide it to them. In other words, we are providing options for our customers, but not enough. We are limiting our customers because we only allow certain options and specific types of customizations.

LABOR/WASTE PROBLEMS

Last month we had the highest amount of waste ever recorded, along with the largest number of hours clocked since we have opened. This may seem like two separate issues, but they largely impact one another. When we waste precious time on a product that is unsellable, it is detrimental to our business. Not only is the material wasted, but the

time spent cannot be recovered.

For example, when we released the pearl wire wrapped ring, many of you were unfamiliar with the technique. Although proper training was in conducted, many of you continued to make rings that were not up to standard. We had to dispose of these rings, meaning we did not make any profit.

RECOMMENDATIONS

In order to provide our customers with the ultimate customization experience, we must adopt a new approach to jewelry making. An investment of a CAD software and and a Solidscape T-36 3D printer will allow customers to choose from thousands of combinations of customization. Once the software and printer are installed, we will implement a strict training schedule so employees can utilize our new machinery to the best of their ability.

In addition to solving the proposed issues, there will be an initial increase of labor hours. However, we calculate that after training is complete, the 3D printers will allow our employees to produce products with ease and efficiency.

SUMMARY

In order to gain future success, it is clear that we have to acknowledge the concerns and needs of our customers. Our techniques have become outdated with evolution of new technology. Additionally, new technology has increased our struggle to compete with

cheap labor. Although we pay for the best employee's it is undeniable that technology can provide benefits, including a decrease in product waste. The addition of a 3D printer will allow our company to provide the additional services and products that our consumers are asking for.