Student 2: High Merit

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Mandy ABC is the owner of a mandarin orchard in Gisborne. The orchard has a current valuation of $2,000,000. At the peak of each season Mandy employs 30 people to hand pick the mandarins, however, over the past three years she has noticed that approximately 15% of her produce has been unpicked. Each year there is an approximate 5% loss of produce as some mandarins may be picked/harvested before they ripen or become damaged during harvest/sorting.

Mandy has decided to investigate buying a second-hand citrus harvester for $120,000. The harvester will reduce the orchard's wage expense because although the 30 pickers will not be needed an additional five workers will need to be employed in the sorting shed. As the orchard cannot afford to buy the harvester outright, Mandy needs to investigate financing options to pay for it. There are three possibilities for financing the harvester.

Increase the mortgage 1

The orchard has a $750,000 mortgage over a 30-year term on a floating interest rate of 5.79% per annum. Repayments are $4,396 per month ($2,083 interest and $2,313 principal). This means over the span of the mortgage she would pay a total of $1,582,514 ($750,000 principal and $832,514 interest). If the mortgage is increased to $870,000 to pay for the citrus harvester repayments would be $5,099 monthly ($2,416 principal and $2,683 interest), an increase of $703 per month. By the end of the term, Mandy would have paid an extra $253,203. That means the harvester in the end would 3 cost her $253,203 instead of the $120,000.

[Tables verifying all calculations have been omitted from this exemplar.]

The security for a mortgage is usually the property/land the mortgage has been used to buy, and land 4 usually appreciates in value. The harvester is not land and is likely to depreciate. This might be of concern to the bank. They might ask that the security be a building. According to the New Zealand reserve bank, the addition to the mortgage would be an investor loan, which has tighter restrictions for investment in property, and these restrictions relate to the risks that are associated with the loan. The low-deposit loans in the high-LVR (LVR stands for loan-to-value ratio) category require a 35% deposit from the purchaser and allow for a 65% external investment from external sources such as a bank. Before a mortgage increase Mandy had an owner's equity of 62.5% totalling $1,250,000 while the external finance (comprised of just the mortgage) totalling 37.5% ($750,000). 3 It is very viable for Mandy to increase her mortgage to purchase the harvester if she wishes as the investor finance remains below the reserve bank's standard of 65%.

Paying over twice the harvester's value by adding it to the mortgage is very unwise so it is not a sensible business option for Mandy and her business. It would increase her financial risk. As it is a second-hand harvester it may depreciate a lot faster as it may already have had a long service life, 3 which would also increase maintenance costs significantly. The increased mortgage will also decrease Mandy's equity in her business.

Asset/equipment finance 1

The business selling the used harvester allows approved purchasers to buy the machine on credit, like hire purchase. Asset/equipment finance does not use a business's existing capital. The finance can usually be tailored to the asset lifespan and payment amount and the asset's ability to generate a cash flow into the business such as income from seasonal mandarin harvests. A significant advantage of this option would be this flexibility and ability to adjust repayments in line with the 4 seasonal income. This advantage is not offered by other financing options. Asset/equipment financing would be a viable option for Mandy and her business as it does not risk her orchard or any

other current assets as security for the financing loan. If Mandy cannot keep up with the repayments the lender would force the sale of the harvester rather than assets such as business vehicles, other equipment or the orchard land. Mandy would end up paying $192,000 for the second-hand harvester. 3
There will be an establishment fee of $2,000 to set up the contract.

Crowd Funding

Crowd funding is a newish type of financing option where a business relies on members of the public financing the expansion of a business. 2 Crowd funding via an internet platform can speed up the process of collecting money compared to personally collecting money by hand depending on the public's view of an effect something like Mandy's harvester would have on the community. Crowd funding is held through online forums that connect businesses with investors whom wish to sacrifice money in hopes of a return of some sort whether it is an influx of money in a region or an increase in production. Crowd funding usually also does not limit the amount of money you can raise unless it is over a very high quantity e.g. millions. Crowd funding sites do charge fees to use their services, which is a risk those applying do need to consider as this increases their financial risk. Crowd funding can bring communities together and increase trust between community members.
If Mandy decided to crowd fund she is unlikely to raise the required $120,000 within a reasonable time frame and potential crowd funders might wonder what they could personally gain from helping a 4 for-profit business buy a fixed asset. However, as Gisborne is a large fruit growing area she may be able to rent a harvester off another citrus orchardist or combine spare funds with local citrus orchardists to co-own the harvester or buy a new one. This would likely be best as the costs are equally shared through all parties and allow for better supply chains throughout the community.

Best option

Overall, it would be best for Mandy to use equipment/asset financing to fund the harvester. This is 5 because if she cannot afford the finance payments, the harvester will be sold instead of any of her other business assets. This is not a good situation to be in, but it would put Mandy back into the position she was in before buying the harvester.
Over the six-year period, she would pay a total of $192,000 (the extra $72,000 is interest) for the harvester if using equipment financing instead of the $253,203 if she financed through her mortgage. This is better than paying double the harvesters' value by adding the $120,000 to the business mortgage and minimises her long-term risk, as the harvester will be paid for in the medium-term. Mandy's orchard business would pay less for the harvester than financing through a mortgage increase and would not be at the mercy of finding enough members of the public willing to contribute to a crowd fund campaign.

Conclusion

Purchasing the harvester will reduce the orchard's wage expenses by 20 net employees; picker jobs will reduce by 25 but five people will be redeployed to the sorting shed. This reduction in staff will negatively impact on employment in the region. Timeframes for harvesting and sorting should theoretically decrease significantly but the staff will have to be taught how to operate in and around 6 the harvester to reduce the risk of injury. The orchard may be charged higher ACC premiums due to the added risk of the harvesting machine. Mandy may also have to look at bringing migrant workers in for peak season as "the supply and quality of labour is not always available from within Gisborne". However, Mandy can afford the harvester and it will benefit her business as there will be less production waste, reduced harvest times and the quality and quantity of mandarins would increase, allowing Mandy to export more mandarins overseas.