

What can the Web Calculator do for me? Applying the Technology Decision Calculator for Swine Operation Profitability

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New technologies are constantly being introduced into barns due to promised benefits and enhanced profitability. However, these innovations can also introduce new challenges and costs, such as the impact of new technologies on worker health and safety. So how do you know if it will work in your specific situation? Prairie Swine Centre and the Canadian Centre for Health and Safety in Agriculture have collaborated to develop a simple, personalizable web calculator that can help predict the value of technology adoption. This multidimensional tool incorporates implementation costs, productivity, and health and safety impacts, and was developed to help forecast the overall benefit of investing in new technology.

Visit the [technology decision calculator online](#) to see if that new tool, equipment, or process has what it takes to be profitable in your barn. In a few simple steps, you can fill in the inputs and click on the 'calculate' button to get a personalized result presented as incremental cost-benefit ratio. The incremental cost benefit ratio shows the difference between the current situation and what is obtainable with the new technology; values greater than one indicate profitability, while values less than one indicate the proposed technology isn't a good bet. In addition to the incremental cost-benefit ratio for over the life span of the new technology, the printable report delivers a range of estimates based on different pork prices and cost and benefit variance.

The technology decision calculator was developed based on the test case of needle-less injectors, the topic of a research study at the Canadian Centre for Health and Safety in Agriculture. In many cases, it is not possible to know in advance what all the costs will be. Since it is not always possible to get precise costs when estimating the amount of labour, maintenance, and productivity increases, this tool also provides information to allow for educated estimates. We provide background information, things to consider, and the dollar-value results from the needle-less injector study. Of course, each new technology is different, but it is hoped that this background information will allow you to make an educated guess about the numbers for your enterprise.

Of course, all model reports are estimates and not a guarantee. The model cannot account for all possible variables and is only as accurate as the numbers given as inputs. This tool allows you to select the range of certainty for your cost estimates, resulting in a range of potential cost-benefit estimates. The lowest estimates from cost benefit analysis are considered the most conservative, i.e. the worst-case scenario. If the conservative 'worst case scenario' is still profitable, then the model projects that your organization would still benefit from the new technology even with the worst combination of costs and benefits. You can also re-run reports for different values, and see how small differences can add up.

We invite you to try using this web calculator for your next project and see how it works.

We would love to hear your feedback!

Access the technology decision tool via the [Prairie Swine Centre 'Tools' website](#).
To learn more about the needle-less injector study, visit our [study website](#).
With questions or feedback about the tool, feel free to contact us directly:
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