



Planning for a growing future



Module One

Optimizing your business model to suit the labor challenges

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At Autogrow® we help growers produce sustainable crops through automation, but we are also interested in ensuring those same growers are in the best possible position for the changing nature of our industry – whether that's technology, labor or sustainability.

The purpose of this workbook is to give you a few examples of what other growers have implemented and things you should be considering for the future.

We can't cover every scenario, but we hope what's discussed in this workbook can start a conversation in your business and ultimately put more money in your pocket while having a positive impact on the industry and the environment.

Darryn Keiller, CEO Autogrow

Labor in your growing future.

Questions to consider

- | | ✓ | ✗ |
|--|-----------------------|-----------------------|
| 1. Have you calculated how much time and money you spend on recruiting and training staff? | <input type="radio"/> | <input type="radio"/> |
| 2. Do you know what skills you need to be looking for when recruiting? | <input type="radio"/> | <input type="radio"/> |
| 3. Have you had problems finding the right people to fill your roles? | <input type="radio"/> | <input type="radio"/> |
| 4. If your Head Grower left tomorrow, would you be prepared? | <input type="radio"/> | <input type="radio"/> |
| 5. Do you have a succession plan in place for the business? | <input type="radio"/> | <input type="radio"/> |

Mostly ✓

Great! You're on the right track.

Mostly ✗

You have some work to do.

•• What's going to be your next step? ••



Let's think food forward

Case study.

Patrick Malley Maungatapere Berries

How one grower changed his business model to provide employment and still make a profit.

Labor is a hot topic with growers. Globally the World Bank notes that employment in agriculture has reduced by 8% in the last 10 years. Autogrow sat with New Zealand berry and kiwifruit grower Patrick Malley to discuss the revolutionary work he's doing to address labor and skill shortages in his region while growing his business.



Maungatapere Berries Harvest Manager Aroha Heta with Owner Patrick Malley

How have you changed your business to suit the labor challenge?

So, for us, the way we've structured our business, and even the way we've structured our growing, is based on how we deliver employment. When we moved to the Northland region, we were a mono-cropping operation focused on growing kiwifruit. We quickly transitioned into including a contracting element into our business, doing both kiwifruit and avocado orchard management and orchard work, as well as growing on our own orchard.

And the intention around that was to provide sustainable 12-month employment in horticulture. Because realistically, with the people that we employ especially the younger Maori demographic, they don't want to work

during kiwifruit harvest for three months on-call. They don't want just the chance to then work for a couple more months and then wait 6 months before they do it all over again. They want sustainable jobs, they want jobs that they can be proud of.

And so that started the journey for us, that then moved into hydroponics and berries. And since then, we've focused our cropping so that we've got crops that support each other in terms of timing of activities, that provide work whether it's rainy, whether it's windy, whether it's sunny. And effectively have focused on delivering an outcome for us as a grower, for the consumer of course but, also for the people we employ.

Quick Facts:

Total Area: 30ha

- 45 permanent staff & 130 casuals
- 35,000 raspberry plants grown hydroponically
- 7 different horticultural crops grown on 30ha

“ We started calculating it (costs) and then it made us feel a bit sick. And then we stopped using that as the reason to stop investing in people.”

Essentially, you've restructured your business in order to support workers. Are there any other growers doing the same thing that you know of?

Yes, absolutely there are. A lot of the kiwifruit and avocado operations are super focused on making sure they are giving people not only full-time work but skills and opportunities going forward.

For us it is also about stopping using the term “seasonal workers”. They're not seasonal workers anymore. They're horticulturists and that's where I think one of the big step changes needs to happen. We need to stop focusing on just the seasonality aspect of those jobs

Have you calculated how much time and money you spend on training and recruiting staff?

We started calculating it and then it made us feel a bit sick. And then we stopped using that as the reason to stop investing in people.

I mean, our business has grown significantly over the last three years. When we first moved to Northland, we had three staff, that was about six years ago. Now we've got 45 permanents, 180 staff harvesting, and we've

because horticulture is year-round. There are ebbs and flows for sure, but the work never stops. The plants never stop growing, and even in winter when they're taking a sleep, there's a heck load of work to do. So yeah, just get people in there, get them excited about the job – working outside, working with people, seeing the results of your work. Looking behind you and going “I pruned all of that!” and going home with a sense of achievement. Yeah, I think it's important.

got a full time HR manager alongside systems and processes.

We went through providing numeracy and literacy training to a lot of our staff as well, and things like that are big ticket items that you can easily point to as cost, but everything we do has to have that pay-back and as long as you can point to that, it's still worth doing.

What skills are you looking for when you recruit?

I think, in terms of general recruitment, we're still looking at the lower level worker and building those people up. It's hard to get someone with a master's degree super excited in horticulture at the moment because of all the negative noise that is going on in the media. Even though it's a fantastic industry to work in and there's so many exciting things happening.

There're so many new innovations that you guys (Autogrow) are doing that are just out of this world, and we all want to get people excited and motivated about that sort of stuff. We just want to get people in at the base level

and then grow them up through the industry, and we've done that a lot in the past few years. We've got people that have been with us for 4 or 5 years that are now in manager roles – when they started, they had never had a job before.

It also comes back to core personal skills; timeliness, attitude, willingness to learn, having a sense of wonder about things and a desire to do things well.

No matter what level of skills they might have, those core attributes must be there to have a good staff member in horticulture.

There would be a few growers out there wanting to know the cost of making these changes and what your return on investment has been?

An excellent question. I've always been brought up that everything we do has to have an economic basis to it otherwise you're costing yourself money for no purpose. You must be cost neutral at a minimum, ideally making money because growing is such a difficult job and there's such high risks involved.

For us, in the employment space though, it's also about the cost of not doing it. I mean, when you put so much money into your land, into your plants, into your processes, machinery, everything else, to then cheap out on your labor, which is one of the most important things you could possibly do, doesn't make sense. Particularly with berry crops

where there's such a high manual component to what you're doing. You'd be doing yourself a disservice. To start you need to make sure your staff are reliable, they know what they're doing, they want to be at work. In terms of how much it costs you, it can be a lot of money, but it can also be extremely rewarding as well.

We are doing quite a few extra things these days - we've got a bus service that comes into our orchard because we wanted to eliminate people that couldn't get to work because of no fuel or no car or no ride. Or were coming to work with no license and getting fines and just reciprocal failure in their lives that were just going to keep them down.

So, you have seen a financial benefit?

Yeah, absolutely. There's a couple of key areas you can look at easy financial benefits. Retention is a big one. Training costs. It's easy as a grower to not value your own time, but when you realize how much time you spend with individual staff members, training them every step of the way and then if you just let them go off into the wilderness and hope that they're going to come back – it's just not worth it.

You want to train those people and get them better and better and better every year. Build on those skills and learning and retain those good people. Financially it's easily worth it.

In addition to that, the quality of the job, the speed of the work and the investment people repay into your business is an easy financial benefit.

And for us, probably the easiest cost benefit has been in efficiency. You get someone who is in their first year doing a job, as opposed to someone who's been doing it for three years – the cost per square meter in kiwifruit or the cost of a kilogram of berries stacks up, easily.

Our business has doubled in size year on year for the last three years and we couldn't have done that without good staff. It's impossible.

Final thoughts?

There may be a labor shortage happening or an even bigger one about to come our way, but it's up to each grower to do their homework, invest in their people and give yourself a cushion for when it really starts to bite. If you spend the money, you'll make money. We are definite proof of that concept.



“If you spend the money, you'll make money. We are definite proof of that concept.”

Maungatapere Berries are the 2019 winners of the following awards

- Ballance Agri-Nutrients Soil Management Award
- Bayleys People in Primary Sector Award recognising the value placed on employees, development and career opportunities in horticulture
- Hill Laboratories Agri-science Award
- Waterforce Integrated Management Award
- Massey University Innovation Award.

Checklist.

All of the questions below can help optimize your labor force and free up staff to focus on other areas of importance.

	Yes (1 point)	Partially (2 points)	No (3 points)	Not Applicable (0 points)
	Y	P	N	NA
1. Are you manually watering your crops?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Are you manually measuring your EC & pH?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are you manually opening and closing your vents?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Are you manually adjusting your fans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Are you manually adjusting your lights?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Are you manually fertilizing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Are you manually measuring your run-off?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Are you manually checking the temperature and then adjusting your controller accordingly?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Are you using a notebook to track your data?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Do you have the skill set within the business to analyze your data?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you scored...

Between 0 - 10

Get in touch with us and see how we can help you get up and running with automation to free up labor, optimize your business and improve your financial bottom line.

Between 11 - 20

There are still areas that can be optimized. Get in touch to understand how we can help.

Between 20 - 30

You are well set for automation and taking your business to the next level with new technology. Get in touch if you are interested in taking part in product development or trials of new agtech.

Key Takeouts.

Support Your Growing Future

Diversify your crops – If you're in a position to diversify during a growth stage it can provide positive benefits including all-year employment which reduces costs of retraining new staff.

Move from outdoor to protected / indoor cropping – By protecting your crops this will give you a longer season and more opportunities for employment.

Focus on your people – Good people will take your business far. By creating a retention programme and how you can help them succeed as workers and individuals you'll save money in the long run.

Get involved with new technology – Volunteer to test out new tech by being part of pilot studies. You get to help design solutions that will improve your own business and also be on the forefront of any new agtech that is launched (note: Autogrow is always looking for volunteer growers to test our new solutions).

Recruit for the future – Introduce skill sets into your teams that will compliment new technology.



**Grow
any—
where.**

Control your growing environment anywhere, anytime with IntelliGrow.

Autogrow

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