

## How to Grow a Company without VC Funding

### Funding Sources Expanded Notes

*Growing a company without VC (venture capital) funding can be challenging, but it is not impossible. Here are some ways to grow your company without VC funding:*

1 *Bootstrap: Start small and grow organically, reinvesting profits back into the business. This means being frugal and efficient with your resources and not taking on unnecessary expenses.*

2 *Focus on revenue generation: Focus on generating revenue and building a sustainable business model. Identify your target market and create a product or service that meets their needs. Keep your costs low and price your products or services competitively.*

3 *Build strategic partnerships: Look for strategic partnerships with complementary businesses that can help you reach new customers or provide additional services to your existing customers.*

4 *Leverage social media: Use social media to promote your business, engage with your customers, and build your brand. Social media is a cost-effective way to reach a large audience and build a loyal following.*

5 *Provide exceptional customer service: Word-of-mouth marketing is powerful. Providing exceptional customer service can help you build a loyal customer base and generate positive reviews and referrals.*

6 *Focus on innovation: Continually innovate and improve your products or services to stay competitive and meet the changing needs of your customers.*

7 *Consider alternative sources of funding: There are alternative sources of funding, such as crowdfunding, grants, and loans. Explore these options to see if they are a good fit for your business.*

*Remember, growing a company without VC funding takes time, patience, and perseverance. Stay focused on your goals and be willing to adapt and pivot as needed.*

#### **Use the bucket of water analogy**

*Plug the holes or get a bigger pump*

This is an analogy for cash flow management. Just like a bucket with holes, if your business is leaking cash, you have two options: either fill the holes or find a way to increase the amount of cash coming in.

Filling the holes in your cash flow bucket means identifying and addressing areas where your business is losing money. This could involve cutting unnecessary expenses, reducing debt,

improving collections, and tightening up your budget. By plugging these leaks, you can reduce the amount of cash leaving your business and improve your cash flow.

On the other hand, getting a bigger pump means finding ways to increase your revenue and cash inflows. This could involve developing new products or services, expanding into new markets, increasing your marketing efforts, or improving your sales strategies. By increasing the amount of cash coming into your business, you can offset any leaks in your cash flow bucket and improve your overall financial health.

Ultimately, effective cash flow management requires both filling the holes and getting a bigger pump. By carefully monitoring your cash flow, identifying areas for improvement, and taking action to address them, you can help ensure the long-term success of your business.

## **Alternate methods to fund a small startup which the VCs won't touch**

*There are several alternative methods to fund a small startup that venture capitalists (VCs) may not be interested in. Here are some options:*

*1 Incubators and Accelerators: These are programs that provide mentorship, resources, and sometimes funding to startups in exchange for equity. While not all incubators and accelerators provide funding, some do and can be a good option for startups that need guidance and support in addition to funding. Invest Ottawa is one example*

*2 Crowdfunding: This involves raising money from many individuals through online platforms such as Kickstarter or Indiegogo. In exchange for their contributions, backers may receive rewards or pre-orders of the product or service.*

*3 Grants: Some startups may be eligible for government grants or non-profit organizations that fund businesses working on specific issues or in certain industries.*

*4 Angel Investors: These are high-net-worth individuals who invest their own money in early-stage startups. Angel investors may be more willing to invest in smaller or riskier ventures than VCs.*

*5 Small Business Administration (SBA) Loans: The SBA offers loans to small businesses that cannot secure traditional financing. These loans typically have lower interest rates and longer repayment terms than other loans.*

*6 Microloans: Microloans are small loans (usually under \$50,000) provided by non-profit organizations or community development financial institutions. These loans can be used to fund startups or provide working capital.*

*It's important to note that each funding option has its own advantages and disadvantages, and it's up to the founders to determine which option is best for their business.*

## **SR & ED**

The Scientific Research and Experimental Development (SR&ED) program in Canada is a federal tax incentive program that provides funding for businesses that conduct research and development (R&D) activities. The program is designed to encourage businesses to invest in R&D by offering tax credits and refunds for eligible expenses.

For small businesses, the SR&ED program can be a valuable source of funding for R&D activities that might otherwise be too expensive to undertake. The program offers tax credits of up to 35% of eligible expenses, which can be used to offset the cost of hiring R&D personnel, purchasing equipment and materials, and other related expenses.

In addition to the financial benefits, the SR&ED program can also help small businesses to develop new products and services, improve existing products, and increase their competitiveness in the market. By investing in R&D, small businesses can create new opportunities for growth and innovation, which can help them to succeed in a competitive and rapidly evolving business environment.

To qualify for the SR&ED program, small businesses must meet certain criteria, including conducting eligible R&D activities and having a certain level of scientific or technological uncertainty. The program is administered by the Canada Revenue Agency (CRA), and businesses must apply for the tax credits and refunds through the CRA.

Overall, the SR&ED program can be an important resource for small businesses in Canada that are looking to invest in R&D and grow their businesses. By providing financial support and incentives for innovation, the program helps to promote economic growth and development in Canada.

The following possibilities are arranged by several logical groupings. A few programs will be listed in more than one category as they may be a Federal Program, for example, which is delivered/managed by a Provincial organization, etc.

### ***Funding support available for Small Businesses in Ottawa***

There are several funding support options available for small businesses in Ottawa, including:

1 Invest Ottawa: Invest Ottawa is an economic development agency that provides funding, mentorship, and other resources to startups and small businesses in Ottawa. The agency offers a range of programs and services, including grants, loans, and networking opportunities.

2 Ottawa Community Loan Fund: The Ottawa Community Loan Fund is a non-profit organization that provides loans and other forms of financing to small businesses in Ottawa. The

organization focuses on supporting businesses that have difficulty accessing traditional forms of financing.

3 Women's Economic Ventures: Women's Economic Ventures is a non-profit organization that provides training, mentorship, and other resources to women entrepreneurs in Ottawa. The organization also offers loans and other forms of financing to help women-owned businesses grow and succeed.

4 City of Ottawa Grants and Loans: The City of Ottawa offers a range of grants and loans to small businesses in the city. These programs are designed to support business growth and expansion, as well as job creation.

5 Futurpreneur Canada: Futurpreneur Canada is a national non-profit organization that provides financing, mentorship, and other resources to young entrepreneurs in Ottawa and across Canada. The organization offers loans of up to \$60,000 to help young entrepreneurs start and grow their businesses.

6 Canada Small Business Financing Program: The Canada Small Business Financing Program is a federal program that provides loan guarantees to small businesses in Ottawa and across Canada. The program is designed to help small businesses access the financing they need to purchase equipment, property, or other assets.

Overall, there are many funding support options available to small businesses in Ottawa. By exploring these options and finding the right financing mix, small businesses can access the resources they need to succeed and grow.

### ***Funding for Research with higher Education institutes in Canada***

There are several funding support options available for small businesses in Ottawa, including:

1 Invest Ottawa: Invest Ottawa is an economic development agency that provides funding, mentorship, and other resources to startups and small businesses in Ottawa. The agency offers a range of programs and services, including grants, loans, and networking opportunities.

2 Ottawa Community Loan Fund: The Ottawa Community Loan Fund is a non-profit organization that provides loans and other forms of financing to small businesses in Ottawa. The organization focuses on supporting businesses that have difficulty accessing traditional forms of financing.

3 Women's Economic Ventures: Women's Economic Ventures is a non-profit organization that provides training, mentorship, and other resources to women entrepreneurs in Ottawa. The organization also offers loans and other forms of financing to help women-owned businesses grow and succeed.

4 City of Ottawa Grants and Loans: The City of Ottawa offers a range of grants and loans to small businesses in the city. These programs are designed to support business growth and expansion, as well as job creation.

5 Futurpreneur Canada: Futurpreneur Canada is a national non-profit organization that provides financing, mentorship, and other resources to young entrepreneurs in Ottawa and

across Canada. The organization offers loans of up to \$60,000 to help young entrepreneurs start and grow their businesses.

6 Canada Small Business Financing Program: The Canada Small Business Financing Program is a federal program that provides loan guarantees to small businesses in Ottawa and across Canada. The program is designed to help small businesses access the financing they need to purchase equipment, property, or other assets.

Overall, there are many funding support options available to small businesses in Ottawa. By exploring these options and finding the right financing mix, small businesses can access the resources they need to succeed and grow.

### ***Funding for Research with higher Education institutes in Ontario***

There are several funding options available for research collaborations with higher education institutes in Ontario, including:

1 Ontario Centres of Excellence (OCE): OCE offers several funding programs for research collaborations between businesses and higher education institutions in Ontario. The programs include the Voucher for Innovation and Productivity (VIP), the TalentEdge Fellowship Program, and the SmartStart Seed Fund.

2 Natural Sciences and Engineering Research Council of Canada (NSERC): NSERC offers funding programs for research collaborations between businesses and higher education institutions in Ontario. The programs include the Collaborative Research and Development Grants, the Engage Grants, and the Alliance Grants.

3 Ontario Research Fund (ORF): ORF offers funding for research infrastructure and equipment to higher education institutions in Ontario. Businesses can collaborate with these institutions and benefit from access to state-of-the-art research facilities and expertise.

4 Ontario Brain Institute (OBI): OBI offers funding for research collaborations in the field of neuroscience between businesses and higher education institutions in Ontario. The programs include the Ontario Neurotech program and the Ontario Brain Institute Entrepreneurship Fellowship.

5 Mitacs: Mitacs is a non-profit organization that offers funding and support for research collaborations between businesses and higher education institutions in Ontario. The organization offers several funding programs, including the Accelerate Program, the Elevate Program, and the Globalink Program.

Overall, there are many funding options available for research collaborations with higher education institutes in Ontario. By exploring these options and finding the right funding mix, businesses can access the research expertise and facilities they need to innovate and grow.

### ***Funding for Research and Development with Colleges in Ontario***

There are several funding options available for research and development collaborations with colleges in Ontario, including:

1 College and Community Innovation Program (CCI): CCI is a program offered by the Natural Sciences and Engineering Research Council of Canada (NSERC) that provides funding for research collaborations between colleges and businesses. The program includes the Applied Research and Development Grants, the College-Industry Innovation Fund, and the Technology Access Centres program.

2 Ontario Centres of Excellence (OCE): OCE offers funding programs for research collaborations between colleges and businesses in Ontario. The programs include the Voucher for Innovation and Productivity (VIP) program, the TalentEdge Fellowship Program, and the SmartStart Seed Fund.

3 Applied Research and Development (ARD) Grants: The Ontario Ministry of Economic Development, Job Creation and Trade offers ARD grants to support research collaborations between colleges and businesses. The grants fund applied research projects that solve technical challenges faced by businesses in Ontario.

4 Mitacs: Mitacs offers funding and support for research collaborations between colleges and businesses in Ontario. The organization offers several funding programs, including the Accelerate Program, the Elevate Program, and the Globalink Program.

5 Canada Foundation for Innovation (CFI): CFI offers funding for research infrastructure and equipment to colleges in Ontario. Businesses can collaborate with these institutions and benefit from access to state-of-the-art research facilities and expertise. Overall, there are many funding options available for research and development collaborations with colleges in Ontario. By exploring these options and finding the right funding mix, businesses can access the research expertise and facilities they need to innovate and grow.

### ***Funding support for hiring Co-op Students in Canada***

There are several funding programs available to support businesses in Canada who want to hire co-op students, including:

1 Canada Summer Jobs Program: This program provides wage subsidies to employers who hire students for summer jobs. The program provides up to 75% of the minimum hourly wage for up to 12 weeks.

2 Youth Employment Strategy: This program provides wage subsidies to employers who hire youth aged 15 to 30 years old. The program provides up to 50% of the wage costs for up to 26 weeks.

3 Student Work Placement Program: This program provides wage subsidies to employers who offer work-integrated learning opportunities to post-secondary students. The program provides up to 50% of the wage costs for up to 16 weeks.

4 Mitacs: Mitacs offers funding and support for businesses to hire undergraduate and graduate students for research internships. The organization offers several funding programs, including the Accelerate Program, the Elevate Program, and the Globalink Program.

5 Industrial Research Assistance Program (IRAP): IRAP offers funding and support for businesses to hire students for research and development projects. The program provides up to 80% of the wages and up to \$7,000 in project costs.

Overall, these funding programs can help businesses in Canada to offset the costs of hiring co-op students and provide valuable work-integrated learning opportunities to students.

### ***Funding support for hiring Co-op Students in Ontario***

There are several funding programs available to support businesses in Ontario who want to hire co-op students, including:

1 Ontario Co-operative Education Tax Credit: This tax credit provides eligible employers with a refundable tax credit of up to \$3,000 per co-op student hired per work term, for a maximum of \$15,000 per year.

2 Career Ready Fund: This fund provides financial support to employers who provide work-integrated learning opportunities to post-secondary students. The fund provides up to \$5,000 per student hired for a work term of at least 12 weeks.

Overall, these funding programs can help businesses in Ontario to offset the costs of hiring co-op students and provide valuable work-integrated learning opportunities to students.

### ***Funding support to train or hire Tradespeople in Canada***

There are several funding programs available in Canada to support businesses that want to train or hire tradespeople, including:

1 Canada Job Grant: This program provides funding to businesses to help offset the costs of training new or existing employees. The program provides up to two-thirds of the cost of training, up to a maximum of \$10,000 per employee.

2 Apprenticeship Job Creation Tax Credit: This tax credit provides businesses with a credit equal to 10% of the wages paid to eligible apprentices for the first two years of their apprenticeship, up to a maximum of \$2,000 per year per apprentice.

3 Canada Apprentice Loan: This program provides interest-free loans of up to \$4,000 per period of technical training to help apprentices pay for their training.

4 Skilled Trades and Apprenticeship (STAR) Program: This program provides funding to businesses to help offset the costs of training apprentices in the skilled trades. The program provides up to \$10,000 per apprentice per year.

5 Ontario Apprenticeship Training Tax Credit: This tax credit provides businesses with a credit equal to 35% of eligible training expenses for apprentices, up to a maximum of \$10,000 per year.

Overall, these funding programs can help businesses in Canada to offset the costs of training or hiring tradespeople and support the growth of the skilled trades sector.

### ***Funding support to train or hire Trades in Ontario***

There are several funding programs available in Ontario to support businesses that want to train or hire tradespeople, including:

1 Canada-Ontario Job Grant: This program provides funding to businesses to help offset the costs of training new or existing employees. The program provides up to two-thirds of the cost of training, up to a maximum of \$10,000 per employee.

2 Apprenticeship Job Creation Tax Credit: This tax credit provides businesses with a credit equal to 10% of the wages paid to eligible apprentices for the first two years of their apprenticeship, up to a maximum of \$2,000 per year per apprentice.

3 Ontario Youth Apprenticeship Program: This program provides funding to businesses to help offset the costs of training high school students as apprentices in the skilled trades.

4 Ontario Apprenticeship Training Tax Credit: This tax credit provides businesses with a credit equal to 35% of eligible training expenses for apprentices, up to a maximum of \$10,000 per year.

5 Second Career Program: This program provides funding to help eligible individuals who have been laid off to retrain for new careers, including in the skilled trades. Overall, these funding programs can help businesses in Ontario to offset the costs of training or hiring tradespeople and support the growth of the skilled trades sector.

### ***Funding programs to invest in tooling for small businesses in Canada***

There are several funding programs available in Canada to support small businesses that want to invest in tooling, including:

1 Canada Small Business Financing Program (CSBFP): This program provides financing for the purchase or improvement of equipment, including tooling, up to a maximum of \$1 million per eligible business. The program is delivered through participating financial institutions.

2 Business Development Bank of Canada (BDC) Small Business Loan: This loan program provides financing of up to \$100,000 for the purchase of equipment, including tooling, to support small businesses.

3 Industrial Research Assistance Program (IRAP): This program provides funding to support research and development projects undertaken by small and medium-sized businesses, which can include the development of new tools or improvements to existing tooling.

4 Canada Job Grant: This program provides funding to businesses to help offset the costs of training new or existing employees, including for the use of new tooling.

5 Canadian Agricultural Partnership (CAP): This program provides funding to support agriculture and agri-food businesses, including for the purchase of equipment and tooling.

Overall, these funding programs can help small businesses in Canada to invest in tooling and support their growth and competitiveness.

### ***Funding programs to invest in tooling for small businesses in Ontario***

There are several funding programs available in Ontario to support small businesses that want to invest in tooling, including:



1 Ontario Small Business Support Grant: This grant provides funding of \$10,000 to \$20,000 for eligible small businesses impacted by COVID-19, which can be used to cover expenses such as the purchase of new equipment, including tooling.

2 Ontario Business Development Fund: This program provides funding to support research and development projects undertaken by small and medium-sized businesses in Ontario, which can include the development of new tools or improvements to existing tooling.

3 Industrial Research Assistance Program (IRAP): This program provides funding to support research and development projects undertaken by small and medium-sized businesses, which can include the development of new tools or improvements to existing tooling.

4 Canada-Ontario Job Grant: This program provides funding to businesses to help offset the costs of training new or existing employees, including for the use of new tooling.

5 Eastern Ontario Development Fund: This program provides funding to support business expansion projects in Eastern Ontario, which can include investments in equipment and tooling.

Overall, these funding programs can help small businesses in Ontario to invest in tooling and support their growth and competitiveness.

### ***Funding programs to rent workshops space for small businesses in Canada***

There are several funding programs available in Canada to support small businesses that want to rent workshop space, including:

1 Regional Development Agencies (RDAs): These agencies provide funding and support to businesses in specific regions of Canada, including funding for the development of workshop spaces.

2 Community Futures Network: This network provides funding and support to small businesses in rural communities across Canada, which can include funding for the rental of workshop space.

3 Canada Business App: This app provides information on government programs and services available to businesses in Canada, including funding programs that can support the rental of workshop space.

4 Canada Emergency Rent Subsidy (CERS): This program provides funding to eligible businesses that have experienced a decline in revenue due to the COVID-19 pandemic, which can be used to cover rent expenses, including for workshop space.

5 Industrial Research Assistance Program (IRAP): This program provides funding to support research and development projects undertaken by small and medium-sized businesses, which can include the development of new workshop spaces.

Overall, these funding programs can help small businesses in Canada to access workshop space and support their growth and competitiveness.

## ***Funding programs to rent workshops space for small businesses in Ontario***

There are several funding programs available in Ontario to support small businesses that want to rent workshop space, including:

- 1 Regional Development Program (RDP): This program provides funding to support business development projects in rural Ontario, including the development of workshop spaces.
  - 2 Eastern Ontario Development Fund: This program provides funding to support business expansion projects in Eastern Ontario, which can include the rental of workshop space.
  - 3 Rural Economic Development (RED) Program: This program provides funding to support economic development projects in rural Ontario, which can include the development of workshop spaces.
  - 4 Canada Business App: This app provides information on government programs and services available to businesses in Canada, including funding programs that can support the rental of workshop space.
  - 5 Canada Emergency Rent Subsidy (CERS): This program provides funding to eligible businesses that have experienced a decline in revenue due to the COVID-19 pandemic, which can be used to cover rent expenses, including for workshop space.
- Overall, these funding programs can help small businesses in Ontario to access workshop space and support their growth and competitiveness.

## ***Canada Digital Adoption Program***

### **Grow your business online Grant**

- Micro-grants of up to \$2,400 to cover the cost of adopting new digital technologies
- A network of e-commerce advisors to help assess your needs and discover new opportunities.

### **Boost your business Technology Grant**

- Grants of up to \$15,000 to develop your digital adoption plan.
- Access to a marketplace of digital advisors to help guide your digital transformation
- 0% interest loans of up to \$100,000 from BDC
- Funded work placements to help you implement your plan

Apply online:

[CANADA.CA/DIGITAL-ADOPTION](https://CANADA.CA/DIGITAL-ADOPTION)

1 800 328 6189

# Running your business

## About Partnerships

I don't know of a partnership that did not end in regret. Do it right, Incorporate.

## Stocks and Stock Options Incentives

- Be careful with throwing shares around in the early stages. A guy who stayed for 18 months in the beginning and then leaves still benefits from all the work the folks who stayed did for all time.
- In Ontario, Canada, the maximum number of shareholders for a non-public company is not specified by law. This means there is no legal limit to the number of shareholders a non-public company can have. However, it's important to note that the number of shareholders can affect a company's tax and regulatory requirements.

For example, if a non-public company has more than 50 shareholders, it may be subject to additional regulatory requirements under Canadian securities laws. Additionally, if the company has more than 100 shareholders and meets certain criteria, it may be required to provide audited financial statements to its shareholders.

Businesses need to consider the potential implications on their tax and regulatory obligations as their shareholder base grows.

- Furthermore, the company's articles of incorporation may impose restrictions on the number of shareholders or the transfer of shares. It is, therefore important for businesses to carefully review their articles of incorporation and consult with a lawyer or accountant to ensure they comply with all applicable laws and regulations.
- If you never intend the company to go public, what use shares to an employee where no dividends are paid and the "owner" always has the majority of shares and therefore control?

They will have value when a company is sold, though.

## Why get potential customers involved early in product development?

- Getting potential customers involved early in product development is important because it helps businesses gain valuable insights into customer needs, preferences, and behaviors. By involving customers in the development process, businesses can ensure that the product they are creating is aligned with customer needs and will be well-received in the market.

Here are some specific reasons why involving potential customers early in product development is important:

1 Identify customer needs: By involving customers in the product development process, businesses can gain a better understanding of their needs, pain points, and challenges. This can help businesses design a product that meets those needs and solves their problems.

2 Test product ideas: Involving customers in the development process allows businesses to test their product ideas and receive feedback from potential customers. This can help businesses refine their ideas and create a product that resonates with customers.

3 Reduce development costs: Involving customers early in the development process can help businesses identify potential issues or concerns before investing significant time and resources into developing a product. This can help reduce the risk of failure and ultimately save the business money.

4 Build customer loyalty: By involving customers in the development process, businesses can demonstrate that they value their input and opinions. This can help build customer loyalty and create a stronger connection between the customer and the brand. Overall, involving potential customers early in product development is an effective way to ensure that the product being developed meets customer needs and is well-received in the market.

- Early cash flow from customers who want to influence your priorities in developing the features they value the most, are delivered first.

# **Kevin's 17 things you can do to build "Offshoring" resistant products**

If we are going to bring manufacturing back to Canada we are going to have to be smart about it. Some products and indeed, industries are lost to our manufacturers forever, there are just too many factors stacked against them becoming competitive, but there exist many opportunities to make "Offshoring" resistant products. You need to pick the fights you can win.

Knowing which products favours offshored production comes from hard-won experience by local manufacturers.

Here are a few things your business can do to make your business "Offshoring" resistant:

## **1) Avoid markets where the Cost of Goods is the primary motivating factor.**

It will be no surprise to anyone that things can be made more cheaply in jurisdictions where labour rates are lower, where governments subsidize the costs and where environmental and labour laws favour the manufacturers and where currency exchange rates are kept artificially low. Don't waste your time playing on an unlevel field. Look elsewhere for markets in which you can win. Look for markets where cost is not the only factor.

## **2) Look for products where the labour is a smaller component of the total costs**

## **3) Increase your automation levels to reduce the advantage of offshoring's lower labour costs**

## **4) Help your customer manage their inventory**

Due to the time delay in shipping across the Pacific then across the continent, local manufacturers present an opportunity.

The most economic method of transportation is a 40 foot container full. To fill a container results in higher Minimum Order Quantities; more to inventory, more to secure and insure, more cash flow tied up for longer periods, more risk that a version of a product will be obsoleted before the quantities are sold, or worse, you produced sale wrong the other way, where you are sold out and it takes more than 8 weeks to get a new batch produced then shipped. This will result in lengthy "out of Stock" situations.

Many retailers want to minimize the inventory in their warehouses by having products arrive just as they need them i.e. Just In Time Inventory (JIT) management. Even though your client might buy large quantities from you, and it might be more convenient for you to do fewer

production runs per year, the customer does not care. They only want so many per month. Herein lies your opportunity: make your larger production runs to maximize your savings, then finance and manage that inventory for the client, sending only their monthly requirements. In the long run this will lead your internal manufacturing to gravitate toward being setup to cheaply manufacture in smaller lots. This will get you new customers as well as most offshore manufacturers need large lots to be lower cost, despite their distance disadvantages.

Take a longer view. You may have to subsidize the costs of fixtures and specialized tooling for the first few production runs to make future runs more profitable.

## **5) Be a master at Low Volume Manufacturing business processes and machinery.**

Sometimes speed to market or smaller production runs can be more valuable to a customer than lowest cost per unit.

## **6) Be verifiably good.**

We have all experienced and heard horror stories about things and products that should not be there. Quality assurance inspection at the point of manufacture can be expensive for your inspector travelling there, and Local inspectors cannot always be trusted as they are subject to pressures positive (bribes) and negative (threats to their families) to get the product out.

There can also be a significant problem with consistency. One shipment can be great, the next substandard. You quickly learn to inspect upon receipt as well. If too high a percentage of the product is not acceptable, you're faced with waiting several months to restart inventory that you could've been selling today.

Often the only warranty you get with offshore manufacturing is a single opportunity to inspect the product before acceptance, then an arbitrary number of, say 3% overproduction to be used for warranty service. If the problems, go beyond 3%, it's on you. You can expect the courts of those offshore countries to favour the local manufacturer.

### ***Let's talk about materials used in the construction of products.***

We have all heard about candles from using lead-based paints in children's toys. But what about something as innocuous as the plywood used? Have you ever tried to get any documentation about the glues used in Chinese or Russian plywood sold in Canada?

This is important. Indoor plywood usually contains the less expensive [urea-formaldehyde](#) glue, which has limited water resistance. Outdoor and marine-grade plywood is made to withstand moisture, and therefore uses a water resistant [phenol-formaldehyde](#) glue to prevent [delamination](#) and to retain strength in high [humidity](#).

Anti fungal additives such as Xyligen are sometimes added to the glueline to provide added resistance to fungal attack.

The adhesives used in plywood have become a concern. Both urea formaldehyde and phenol formaldehyde are carcinogenic in very high concentrations. As a result, many manufacturers are turning to low formaldehyde-emitting glue systems, denoted by an "E" rating ("E0" possessing the lowest formaldehyde emissions). Plywood produced to "E0" has effectively zero formaldehyde emissions.

In Canada we have a exterior use plywood manufactured by member companies of the Canadian Plywood Association (CANPLY). There are certification marks (face stamp on unsanded grades) or a CANPLY EXTERIOR edge stamp on sanded grades:

Why is this important? The following is taken from the [canply.org](http://www.canply.org/english/literature_media/tech_glue.htm) web site:  
[http://www.canply.org/english/literature\\_media/tech\\_glue.htm](http://www.canply.org/english/literature_media/tech_glue.htm)

"All panels certified as CANPLY EXTERIOR plywood employ the adhesive, phenol formaldehyde, that meets the requirements for an Exterior Type bond suitable for exposure to extreme conditions of moisture and temperature specified in CSA Standard O121 Douglas Fir Plywood, CSA O151 Canadian Softwood Plywood, and CSA O153 Poplar Plywood.

#### Glue/Bond Information

Phenol Formaldehyde is a two component synthetic glue. Phenol (with the chemical formula  $C_6H_5OH$ ) is reacted with formaldehyde ( $CH_2O$ ) under controlled temperature conditions to produce a thermosetting (heat hardening) resin. This resin is a new chemical entity which possesses properties that are completely distinct from those of either phenol or formaldehyde, with the formaldehyde converted to stable methylene linkages which do not break down under exterior end use conditions. Phenolic resin is typically supplied to plywood manufacturers in a water solution premixed with a catalyst (caustic soda). Soda Ash and bulking ingredients called fillers and extenders (bark and wheat flours, for example) are added to improve gluing characteristics of the mix. Plywood is manufactured by bonding layers of wood veneers with the phenolic resin glue mix, and polymerizing (curing or hardening) the glue in a "hot press". The hot press subjects panels to an approximate temperature of  $150^{\circ}C$  ( $300^{\circ}F$ ) and a pressure of about 1.4 MPa (200 psi), resulting in an inert water and boil-proof bond.

#### Formaldehyde Emission

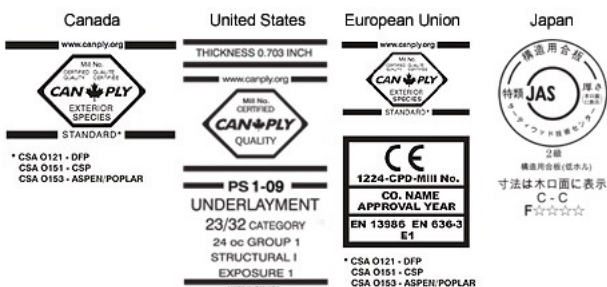
Information developed by numerous organizations have consistently shown that formaldehyde emission associated with phenolic resin-bonded plywood is extremely low. This is attributable to characteristics of the adhesive, and polymerization of the resin during the manufacturing process (described above). Formaldehyde emission testing of CANPLY EXTERIOR plywood has been conducted by various accredited laboratories, using internationally accepted test procedures such as:

- ASTM E1333-90 "Large Chamber"
- Japanese JAS "Desiccator"
- European Standard EN 120 "Perforator"
- DIN 52368/EN 717 "Gas-analysis"

Results have shown that formaldehyde emissions are near the minimum levels detectable by the tests, and that CANPLY EXTERIOR plywood qualifies for the most stringent classification levels that have been established (e.g. JAS F\*\*\*\*, DIN E1, or EN Release Class A). CANPLY EXTERIOR plywood also qualifies for the "No Added Urea Formaldehyde" credit in the LEED building rating system.

### Specify CANPLY EXTERIOR Plywood

Not all panel products utilize phenol formaldehyde glue, and other adhesives or products may emit higher formaldehyde levels. However, all panels certified as CANPLY EXTERIOR plywood are manufactured using only phenol formaldehyde glue, and undergo extensive quality control and testing during manufacture and in the CANPLY laboratory to meet stringent requirements. The CANPLY mark is an assurance to buyers that panels meet the high standards established by the industry and that they will perform in a satisfactory and predictable manner.”



You will note that this certification seems important to the US, European Union and Japan. It should be to us as well, but since we have been taken care of, most of us don't know this standard exists. We take it for granted. When dealing with foreign manufactured products, we most definitely should not.

### Recall all those homes in Florida built during the housing boom with drywall made in China.

Over 550 million pounds, enough to build 60,000 average-sized homes, was imported from China between 2001 and 2006. That drywall had more than just Gypsum inside. There were volatile chemicals that produced enough sulphurous gases inside the walls that the odour of rotten eggs was ever present and worsened as temperature and humidity rose. This cause all exposed copper to corrode. Copper pipes, wiring, and air conditioner coils were affected, as well as silver jewelry. That half inch of wire exposed to connect to the wall plugs turned to powder throughout the homes. Homeowners also reported a variety of symptoms, including respiratory problems such as asthma attacks, chronic coughing and difficulty breathing, as well as chronic headaches and sinus issues.



I have used plywood and Chinese drywall as illustrative examples, but they are not alone. We Canadians, over time and through the school of hard knocks, have built up a protection system which includes safe products, consistent quality control and accountability in our supplier chain. Don't assume those protections exist elsewhere, even if a slightly modified stamp appears....

## **7) Protect your and your client's intellectual property (IP)**

*Offshoring manufactured goods has proven to be risky for your intellectual property. There are too many examples of IP theft and, even worse copycat products with your logo appearing on the market.*

*There've been cases for product consent offshore for manufacture. After the initial production run has been sold, the follow-on order occurs where the responses have been a significant increase in the price. The Ivy owner balked and threatened to take the manufacturing to some other firm in that offshore country, only to be told that that wasn't possible because the initial company had obtained Patents in the offshore country for the local company's products and, worse still processes that were taught to make the product in the first place.*

*The press upon your potential customers made you understand the importance of protecting their IP this is one of the core values of your business. For example, during your facilities tour, never show anything construed as another customer site. In fact, make it obvious during your tour that you use them away from some areas, so they have concrete evidence that you're proactive about protecting their IP. And Silicon Valley it is the norm to have employees all sign nondisclosure agreements, but I'm sure that they will inspect the IP that they come in contact with. This is a good example to follow in all industries.*

*Look for products where IP is particularly difficult to protect where customers are very concerned. You can win this business.*

## **8) Cultivate potential partners to work on projects.**

*You can't be the best at everything. Focus on your core competencies and farm out the rest to others who are focused too.*

## **9) Clear communication and collaboration are key**

*When dealing with countries where native language is not your own and whose cultures, Business ethics and basic assumptions are not what you have grown accustomed to, then there is potential for unintended difficulties to arise. No contract no matter how well written can head off conflicts due to the above issues.*

*Be available for consultation even if your customer is on the other side of the continent. You still share a common language, common values and common legal structure that will help enough misunderstandings. Use the Internet tools that facilitate collaboration between you and your client but also between you and your subcontractor/partners.*

## **10) Don't ignore your local advantages.**

*e.g. Having employees work at home is not an option in China. Their homes are not large enough. We can. Modern offices have become interruption factories. Building a culture where people can work remotely, if they choose to, can be a huge competitive advantage. The most obvious is reduced overhead costs of supplying office space, but the more important ones are more subtle: e.g. the most talented people in Canada don't all live in one place. Restricting your hiring to a small geographic region means you're not getting the best people you can. The best place to live is subjective. It depends on who you are and what you like. With remote work an option you will have access to a much richer talent pool. employers and employees how they can work together, remotely, from any desk, in any space, in any place, anytime, anywhere.*

*e.g. Right or wrong, the world sees Canada through a few lenses. Use that. e.g. Clear Canadian water from the Rocky Mountains, quality high tech winter clothing,*

## **11) Target products that are revised often**

*Things change over the life of a product. Perhaps it's design changes to eliminate a flaw or weakness or a required enhancement to deal with the competition. Maybe it's a change in materials or sub-components due to obsolescence or non-availability. Maybe it's just a change in order quantities due to unexpected sales growth or shrinkage. It is typical for an Offshore manufacturer to take 2 months for a change request to move through the extended supply chain to reach stores. It can take much longer especially if the client ordered a huge stock to get a price reduction or container load break in shipping costs.*

*If you are able to deal with change on a very short turnaround you have an important advantage over offshore manufacturers.*

*Look for client with relatively new products that are still undergoing lots of changes. Look for companies that want to build on demand and not keep much inventory because of a short revision cycle.*

## **12) Not all technology has made it offshore.**

*If you have a cutting edge technology in end product or manufacturing procedures, then you can run circles around those who have no experience with it. Look for products that can benefit from it.*

## **13) Point to happy customers**

*If you have a list of happy customers who were willing to talk about their experiences working with you be sure to use those great references. In the case of references for offshore suppliers, what's the point of being pointed to a reference who does not speak your language or if they do not share your expectations for quality, after sales service, and on-time delivery?*

#### **14) Look for products that are costly to ship or or don't do well, when shipped in a container.**

*The most cost-effective way to ship products from overseas is in a large Metal shipping container. For bulky or extremely heavy or very fragile products that will raise the per unit cost on the shelves to a price point where you can compete.*

#### **15) Your Clients should be looking for suppliers with a stable workforce**

*It takes a client significant effort, time and expense to transfer the knowledge to manufacture a product the way they expect. In companies with a high turnover of employees that retraining and checking will be never ending for a client. In jurisdictions for employees are not well treated they do not last long. Turn over in China is still about 20% per year. Compare that with the turnover in your shop. Make sure your potential client is aware of that. Even if they don't low employee turnover is your competitive advantage in products that have high learning curves to produce. Look for them.*

#### **16) Make sure you get invited to the table to provide a quotation.**

*If you lose, do it with dignity keep the door open for future Business.*

*You never know when a customer my feedback. They may be unhappy with their initial supplier.*

*They may want to ensure a reliable supply they may wish to have multiple vendors. Any case you Want to he invited to bid on their next product.*

*One of the most important things is to learn is why you didn't get the job, so you can do it differently the next time. Many clients, if asked nicely, will tell you.*

#### **17) Its all about trust:**

*Trust in your use of quality components free of toxicity and flaws.*

*Trust that your goods will arrive when your client needs them.*

*Trust that you will keep your client's secrets*

*Trust that you'll be there for warranty work should it be required*

*Trust that you are of similar business culture and therefore understand their needs, without documenting everything.*

*Trust that when bad things happen to good people there is a justice system that will deal fairly with all parties.*

*Trust that you can be a long term partner, if you earn it.*

*Avoid customers who think that price is the only thing that matters. They are assuming that all the other Trust items are there too. They rarely are.*

## ***Kevin's Final Thoughts about VCs***

The VC route is not the only way to success. Building a company quickly (within the 5-year attention span of a VC) so the VCs can liquidate their investments is their definition. It is sometimes better to build a company a little slower, with early sales to self-finance growth, with stability for founders and employees, with sprints to deliver on time but without constant pressure which is unsustainable and therefore guarantees burnout and a poisson working environment. This film illustrated the problem of blushing too hard. If your family life is falling apart around you, how do you focus and deliver your best at the office? Invest in your people and they will return with long-term personal loyalty. The American style MBA trained VCs still believes in "Human Resources" as if humans are consumable/replaceable commodities. It is strange since these VCs say they select companies by looking for great teams in the same breath.

I have done the high-tech rat race. I worked for the first Engineering Workstation supplier Apollo where we wrested control from IBM mainframe sales guys and won Bell Canada, Northern Telecom and Nation Defense. I did the same at Hewlett Packard and Silicon Graphics in their hay days. I have started/run my own system integration company, (sold to a billion-dollar US firm- I retired for the first time at 35) then started a computer-telephony development company which won virtually every award there is in the Apple Mac market, including two MacWorld Expo Best of Shows, Best product of the year from MacWorld Magazine and Best product of the year by an Ottawa Company from OCRI. I am not an armchair quarterback. I was the first Angel investor in TransGaming, which went public and dominated the application/game porting from Microsoft to Mac, Linux, Android and more platforms. I also have a few other Angel investments percolating.

Believe me when I say these startups need not have failed. Like a fine wine, they needed more time for their product ideas and product development to be refined. VCs throw a lot of money at an opportunity and say GO FAST, as if money empowers the hiring of 9 women to make a baby in a month.

I have long believed that just because one can convince some folks to let you invest their money in startups, that you somehow know best how to actually build and run a company in all sorts of areas, is a dangerous assumption for VC Fund managers. There will be startups with folks who have done it all before, who need the cash, who will disagree with these finance folks and who will be ousted for being right but insufficiently contrite. It's never happened to me but I have witnessed it too many times.

There needs to be an alternate game with a more level playing field between those who have money and those who can profitably use it as an engine for creating wealth, not power for a few VC Fund managers. Not all VCs are bad, but there are enough to make it a game to be avoided if possible. The statistics of founders and even Angel Investors surviving two years of VC money is not good, even when you count only the "winning" companies. This is why I think CrowdFunding should be rigorously explored and offered as a balance to the VC route.

I hold the opinion that selling early-stage equity is a bad idea. Supplying equity to employees is a bad idea. It forces the company into going public before any liquidity for the shareholders is realized or creates internal forces to sell the company to a big one just as they start making money for the society that supported them. If the company is never sold or never goes public, and the founders keep the majority of the stock, then employees may hold partial ownership but have no control and no liquidity. Better to find some other way to acknowledge their early-stage contribution which does not have long-term effects on the ownership and profitability of those who come after them. A company is not like a building where the guy who built the foundation, 20 years later, his foundation stones are still holding up the building and doing some good. It is more like a farm with plants that were started by one employee and need to be tended each year for that early work to remain in existence.

Perhaps the plant doesn't exist anymore because new plants have replaced his early work. Should the early worker who has since moved on still receive benefits when he is no longer tending the plants? There are no perfect answers, but I see few alternatives to the VC shares-in-a-company model. We need to explore and evangelize those options if they truly exist.

This "story" may not have its intended result of encouraging another generation of entrepreneurs. I think it goes past the "cautionary tale" status into one that agrees with the Canadian psyche of: "We can't win. The US has all the advantages. This story is proof."

I rage at this. It need not be true. In my case, 4 guys and a website ruled the world in our market niche. We Canadians need to wallow in more success stories of guys thinking outside the box. Those movies I would watch. That's a movie you should star in.

Kevin Ford PEng CEO  
Onshoring Ventures  
Ottawa

[kford@onshoringventures.com](mailto:kford@onshoringventures.com)

Copywrite April 20 2023 Kevin Ford