



03 Finding Your Niche with Craig Stewart

TRANSCRIPTION

James: Hello and welcome to Resourceful - Stories From The Site, proudly brought to you by Resources Unearthed. At Resources Unearthed we help executives, professionals, and business owners in mining and resources to be successful both personally and professionally. We've created this podcast to help you in your employment or business and we'll be chatting to people who have a proven track record of success in the industry. Thanks for joining us.

I'm James Marshall from Resources Unearthed and welcome to today's episode of Resourceful. Today we're chatting with Craig Stewart from Chasm Consulting - the creator of Ventism ventilation software and safety management software C-Safe. Craig is a mining engineer turned software developer who's made all the right moves to take his business global. He understands the importance of maintaining good working relationships and the benefits this can have on the growth of your business. Craig also shares how you can combine your interests and skills to create a niche in a field that you truly enjoy.

Brett: Hi, my name is Brett Cribb - managing director and founder of Resources Unearthed and welcome to Resourceful - Stories From The Site. Today I'm joined by Craig Stewart. I first met Craig when we started our careers in the mining industry at what was known as Mt Isa Mines. Craig has been developing software for use in the resources industry for years. I can still recall him being an absolute gun at excel, which was especially rare back then. He now manages a successful software business that services the resources industry particularly in safety management and mine ventilation.

Today Craig and I will explore some of his most memorable stories from the site. So wherever you are sit back, relax and enjoy this episode of Resourceful.

Welcome Craig.

Craig: Thanks Brett. It's a pleasure being here.

Brett: To start with for the benefit of our listeners, can you give us a brief overview of your career?

Craig: Yeah sure. I'm from South Australia originally. One of my hobbies as a teenager was playing with computers and electronics and in fact one of my goals was to go to University and study those fields, but unfortunately I didn't have the grades at the time so I had to relegate to my third option which was mining engineering, because I do like to explore caves and tunnels and I like to play around with mechanics and stuff.



So mining engineering ended up being my study at University and from there basically I worked my way through University doing it the long way. It took another year or so to finish off the course, but during that time I had some work experience at Mount Isa Mines. I loved the place, it was a great place to get experience. It was a fantastic research place at the time and had lots of resources with some of the high tech stuff they were doing and so I was very happy to join that company as a graduate employee after University.

Brett: Since that period what sort of things have you done and throughout your career?

Craig: Well I guess that prompted first of all a deep understanding of mining so during that time I was a mining engineer on the site for five years or so. I then moved away from Mt Isa to Darwin and I became a mine manager of a mine in the Northern Territory called McArthur River. I stayed there for about seven years and then I moved to Queensland to Townsville to become a mine manager there of a mine near Townsville as well.

I got a very wide range of experience in everything to do with engineering, mine planning, technical, blasting, ventilation but all that time I was actually looking at one of my hobbies and passions which was software as well. I managed to sort of combine the two careers eventually so that after I finished my time as a mine manager in Queensland, I took that opportunity to form my own company specialising in mining software.

Brett: Maybe just tell us a bit about how you got started in the mining industry and resources industry?

Craig: One of my goals becoming a mining engineer was to increase my knowledge about all things mining whether it be geology, or machines, or planning or blasting. One of my first jobs in that career was as a ventilation officer and that probably structured my career for pretty well the rest of my career so far in terms of what I wanted to do. Not because I enjoyed it that much, in fact I found it quite hard to do. It was the sort of job that no one wanted to do and it was the job at the time that I didn't want to do either because it's too hard, but it made me think about well, how can we make this job easier or more attractive.

One of the things that I could do because I had some experience writing software - I used to write computer games as a teenager, was to create some software that would help ventilation make sense to me and when I showed that software to other people, it helped make ventilation make sense to them as well. That kicked off the seed of the idea of the software and the mining together.

In the meantime I continued my career in many other roles, both technical roles as well as management roles. All of those activities consolidated my thoughts in terms of how mining software



can make someone's job easier. Whether it be safety software, or ventilation software, or spreadsheets or databases, I was always looking for angles that I could make my own job easier in those mining roles. Quite often those ideas flowed to other people who thought they could also use that same software to make their jobs easier as well.

The whole idea of germinating the software development and the mining together was really driven by my own need initially - my own need to make my job easier and particularly as the mine manager where you had to have information at your fingertips all the time. There was no real good options at the time back in the 90s and the 2000s for that sort of software. That really prompted me to think about ways that I could combine the skills as a software guy and a mining engineering guy into something that perhaps would be unique and useful for everyone.

Brett: I certainly can probably relate to Craig's story there and that the job he talks about was at Mt Isa and the copper mine out there. It was a really large operation with really complex ventilation needs and a lot of work. To have come up with the idea was quite amazing.

Craig: I mean there's something like 500 kilometres of tunnels underground, the mine was six kilometres long by two kilometres deep and to get your head around a system that complicated by looking at paper plans was just never going to work for me. I'm a visual sort of guy. I like to see things visually in three dimensions and that was what prompted the whole ventilation experience.

Brett: Having managed the operation it was certainly very three dimensional. You had to think. So it's interesting how you could progress that into software. Could you tell me a bit about how you progressed to where you are now and the skillsets that led you to that position?

Craig: Yes sure. As I said, as a teenager my mother bought me a small computer as a 13 year old or something and that got me interested in computers and what they could do. It wasn't until I realised my career as a mining engineer that I realised I could actually combine those two skills together in a way that perhaps other people didn't think about it. It's all very good for software guys making software and engineering guys doing engineering, but quite often the software didn't match the engineers requirements and vice versa and I think together those two skills combined helped me make software that people wanted to use. So obviously as my career as a mining engineer and a manager I couldn't spend a lot of time focusing on doing that sort of work.

I had my own job to look after and I had responsibilities but always in the background after work or on weekends I used to play around with ideas and things that I could use to put the software together. At the time I got an agreement with the mine to let them test my software in my own time. Most companies have IP agreements with their employees, but they released me for those if I shared my work with the company after hours, providing it didn't eat into my own jobs. And then as a result I got



the opportunity to play with some of these ideas in a mine that was very receptive to research and development.

They had some fantastic departments at Mt Isa Mines that really pushed the boundaries of so many different sciences whether they be mining, or backfill, or metallurgy or smelting. They were awesome. Some of the best technologies in the world have come out of Mt Isa. It was a real sort of bed that you could immerse yourself in and not be afraid about exploring boundaries or exploring new ideas. That was where it germinated from obviously as my career progressed the idea of developing software was kind of pushed aside a little bit. That work I did back in the Mt Isa days, I gave it away for free for Universities to use for their students.

I continued to do my own job and after a decade or so I was surprised to see that a lot of the University students coming out were then insisting on using that software that I made for their own mines. That's where the idea of, you know maybe I can make a career out of this after all one day. Maybe I can be successful.

Brett: Mini Mr Microsoft.

Craig: Well yeah wouldn't go that far, but certainly the idea was there. It was germinated and I always thought, "One day maybe I can actually push this engineering and management stuff behind me," because it was pretty tough that sort of role sometimes working in remote spots, being responsible for lots of people and then start a new career. It was probably about 20 years after I did my mining that I finally decided to take that plunge.

Brett: What was it for you that helped you make that step?

Craig: At that stage I'd been in mine management for about ten years or more. While the stress was okay with me, the working away from home for long times and obviously being responsible seven days a week was starting to weigh on me a little bit. So I knew the time was coming where I had to make a change. I either had to go into more senior management roles, at the moment I was just an operational site manager. Or I had to find some other sort of role that I wanted to be in as well.

So over a year or so I plotted my escape from mine management. It was a very deliberate, slow and steady sort of approach I even gave my boss about three or six months notice that I was going to move on which he kind of appreciated and kind of didn't appreciate. That said I picked a date that was very clear to me that was an obvious date to move away. It was about 10 years after I started my management role. It was the start of the year, my wife was in a job where she could support us if things didn't go well and I chose that time in 2008, I think it was in January, to resign my mine



management career and then start my company Chasm Consulting - where I'd focus on developing mining software.

Brett: How did you go about starting? I mean you'd obviously developed the software and things like that in the past but the business side of things?

Craig: The business side of things was a pretty simple affair initially. Obviously, I wanted to take a plunge but not too deep, so it was just a matter of setting up a sole trader business with an ABN. In the meanwhile, I could continue to do some consulting work with my engineering skills and in my spare time as part of that I could then tinker around with software and develop software as well.

So I had an idea in my head that I had to develop a new generation of ventilation software. All the stuff I'd done in the past I pretty well just put aside and started from scratch again. While I was continuing to work on mine sites as a relief mine manager, or as an engineer, or as a consultant, I then worked away on the side of my business developing software as well. I did that for about two years until I had a software that I could actually look at maybe marketing and selling and then after that I started to focus on the software sort of things and not so much on the on the engineering side of things.

The first couple of years of the business it was actually really relaxed for me. The wife was in her job supporting the family if need be. I was working part-time as an engineer and consultant and in the meanwhile I was developing my own software. There was no big capital outlays with the business. We didn't take any loans to start it because it was just a sole trader business, we'd work from home. I could sort of test the market and ease my way into it in a way where I could actually see if what I was doing was going to be successful without making any big commitments.

It was obviously always very nice to have the fallback that I could always go back to mine management or into a mine if I had to if things didn't work out. But then I also had some opportunities to push forward with my wife working and me doing some part-time work for as long as it needed to be as well.

Brett: Over time you built that business to quite a reasonable size. Can you describe some of your steps along the way? What milestones you might have seen yourself or what things you did along the way in developing that over time?

Craig: One of the opportunities I had...Obviously the name that I'd made already because of the software I gave away to the Universities was definitely a help, because people recognised the brand of software I'd done before and even though that was only based in Australia, that software, I thought that would be a good way to kickstart this new software I was developing and get people to



try it out. Initially I gave it away to some trusted people I knew - some consultants who worked in many mines around Australia. They used it, they liked it, they gave feedback to the mines that they should use it as well.

It caught on very quickly in Australia anyway. Then I started to cast my..."Well hold on, what about beyond Australia. What can I do there?"

I'd never been overseas in much way before so I wanted to explore that option. After attending some conferences around the world, I started to choose distributors in countries that I trusted that could actually do my legwork for me and start to show my software to other people around the world as well. That was one of the keys of the success of my business.

It's not trying to do everything yourself - it's entrusting other people to do a lot of work for you. It's a big place, the world, and you can't get around to every country yourself. But also those guys know the countries they work in, they know their customers as well. Aligning my software with what they already did in their own jobs was a big key to my success. Sure, you pay a commission for them to do that but the results are that they can cover a lot more ground than you'll ever cover. And that was one of the keys that made our software very popular initially.

Brett: It sounds like a familiar theme that I've seen over the years and that is that finding good people to help you do what you do and not necessarily try to do everything yourself.

Craig: Yeah I've seen some people stumble to that. They try to keep it everything themselves. They try to keep all their intellectual property themselves. They try to keep all of the sales themselves, and ultimately they get nowhere. They get no penetration to the market because they don't know the markets themselves to try to get into sometimes and they don't have the key relationships with people in those markets.

Probably the only reason that my software did become so successful is first of all, you meet people that have a similar market to you. In other words, they had similar customers to what you're after as well. Then you can piggyback your products with their products and obviously access all of their customers immediately.

Some of the companies I dealt with because I did ventilation software was companies that sold ventilation products. Whether it be ventilation bags or fans, they were my customers as well and ultimately they could pedal my software out. While they're selling a fan, they could share my software as well and that approach was very successful.



Obviously my businesses expanded over the time and I've employed more people as well. It gets to a stage where your business does become too big for just you. Really early in the piece I had to start employing people to assist. People to help with the administration, with sales, with other software I wanted to write as well.

The team's eventually grown over the years as I've employed more people in those new roles. Once again without those people to help you, the business can't expand. If you're happy just to do a small business by yourself that's fine, but if you want to expand the business you've got to start to trust other people to take on some of your roles.

And that's tough. Finding people who are like minded like me was difficult and you've got to make compromises when you employ people with certain skillsets that maybe you have and maybe you don't have. Once you can find those people, it's a great opportunity to expand into other areas. It was important too because your business needs to be flexible enough to sell different products. That way the dips and troughs in the sales can be taken up by other products and you end up with a much more stable revenue stream. Putting all your eggs in one basket as such - all you need is one day someone comes up with some better software that beats yours and you're out of business.

So it was important for me to diversify into other things and to try to get a suite of products which would be competitive in their own right. But if one product went downhill then other products could lift and take up the place of that product.

Brett: The other bit that I'd like to explore is you've recently sold your business. We talked over a period of time...There was some visions there that you had. What sort of things have you done over time with that in mind?

Craig: Well it was very clear early on that my goal initially was not to make a lot of money. My goal initially was to get my software in as many mines that could around the world, and make a name for myself and my software. I sold the software at a price which was - talking to most people way too cheap. I could have sold it to three times what I was charging. I did that because I wanted to compete with some other software which was nowhere near as good as mine. I wanted to have a similar price point so people wouldn't be able to use pricing as an argument of whether they wanted to use my software or not.

I developed my software in such a way that it was compatible with a lot of the files that the other software used as well. The customers could very easily transition to your software with minimal amounts of pain. No additional costs. The argument about whether they should use my software or not became null and void. My goal was to initially get my software into as many mines around the world as I could. Then what I could do then is use that as leverage to either market other software or



services, or there was always the thought in the back of my head, "Well maybe that would be a good sales platform to sell the company on one day." If someone ordered to use their customer base I head for marketing their products, maybe that was an opportunity other countries would see value in as well.

It was always in the back of my mind that I could either use this approach to build and grow the business into other products or it would become an attractive sale for perhaps someone to buy it down the track as well. It's important to have some sort of business plan. There was no point me selling the software at a cheap price if I also didn't have a vision to sell lots of it because one without the other wasn't going to work.

I remember early in the in the first year or two I actually started to approach some companies and see whether they wanted to put a partnership with me. They had similar products and I thought my product could add value to their product, and vice versa. A lot of the feedback I got when I said, "Look my goal is to dominate the mining market with my software and have every mine in the world using my software," that was pretty well when I lost them. Most people walked away after that because they didn't think that was an achievable goal.

Some of those people have come back to me 10 years later saying they wish that they had joined up with me at the time but they just didn't believe it could be done.

I saw what the market had already. I saw what was available to people, and I saw how I could step over the products that were on the market very easily. Not easily, but in a way that I thought customers would see value in and it was very easy to see how you could dominate the market with the right product.

Brett: I know the young professionals or business owners are always keen to learn. Can you tell us about a difficult or interesting time in your career and what advice you would give to your younger self?

Craig: Look I've had lots of adventures in my career both as an engineer and a software guy. Focusing on software - one of my problems I guess initially was choosing the wrong people to partner with, or the wrong people to distribute my software. I've made a few mistakes in the past where I've assumed that partners who want to sell my software have had both about interests in mind. Only to find several years down the track that they really couldn't care less about my business and they want to just make a success for themselves and things have fallen apart quite badly on a number of occasions because of that.



One particular case and I won't name the country or the distributor, ended up with threats of going with legal action or to court about breaches of the so-called distribution agreement on my behalf. But when I dug into his activities he'd breached the agreement 10 times more in terms of not disclosing what he was doing and as a result my sales and my profits from that region plummeted to practically nothing and destroyed the brand of my software in that part of the world. If I had known better, if I had been a little less trusting and a little bit more involved in what he was doing, I would have known that well in advance and taken steps to stop it before it occurred. I kept going for five years and by that stage the damage was done.

It was in part of the world that was very hard to access yourself so you couldn't actually go there to investigate the market yourself very easily, and as such I put the trust in the wrong person. When you do create partnerships, they do require work. You have to constantly communicate. You've got to talk, you've got to be open. You can never fully trust each other. You've always got to make sure there's checks and balances in place to make sure that trust is earned. In the early days I failed a few times doing that.

Fortunately it wasn't fatal. Those parts of the world I was in weren't a big part of my market. They could have been a lot bigger, but when those markets collapsed for me there was plenty of other places around that were doing well. So it wasn't fatal but if I had done that same mistake two or three times elsewhere, the business would have been in trouble. You learn lessons about who you trust in business. Not everyone's on your on your side.

That said, it goes both ways. I should say it goes the other way. You've got to obviously make sure that when you form partnerships with people, that partnership benefits them as well. You can't let that shrivel and die. You've got to make sure that what you do will benefit - in my case my distributors, in a way that they can make some profit as well out of their activities and if that doesn't happen too that can shrivel and die as well.

Brett: Yeah, and your customers and the people that work for you.

Craig: Yes exactly. The employees are important and the customers. Fortunately I've got a great reputation with the customers because I work 24 hours a day...Seriously because I work around the world, I do have to actually do a lot of time zones and I do actually check e-mails late at night sometimes and answer people's responses and questions. Over time that's become as a reputation I've been very responsive. We've got a great reputation as a result.

That reputation has flowed into the value of my company. It's one of the reasons my company is valued the way it was, is because people trust the brand, they trust the company and that increases



the value of the company. Even though it's hard to measure as a dollar value in terms of income, the customer loyalty is worth a lot.

Brett: What is your most memorable or funniest story from the site?

Craig: Well actually selling software is pretty boring most of the time. I mean it's interesting seeing and visiting different parts of the world, and I've seen some fantastic things. I've been in the deep parts of Alaska and down whitewater rapids and seen bullfights in South America. That's all fantastic stuff but in terms of adventures...Back in the mining days - back on the mine sites - that's where some really interesting things happened. A lot of those things have actually shaped my company as well.

Some of the things I had as a mine manager, things like fires or emergencies where people's lives were in danger - they have focused me to develop software to help managers in similar situations in the past. I've been lost a few times as a manager when I've had a fire underground and people have gone missing. Fortunately they've always been found, but that said I just wish in those days I had software to help me to manage those situations. That's actually driven my software development.

One particular case we had a few guys trapped underground due to a large fire at the mine. The fire had been burning for 20 minutes until the operator actually walked his way to the surface and raised the alarm. He said, "Look there's a fire. My machine underground is on fire." When we checked the board, we had I think three or four people still trapped underground. We couldn't contact them. We couldn't radio them, we couldn't get them out of the mine and very soon it turned into a mine rescue exercise. The mine rescue people came to the site to try to rescue these people. They were on the surface and watching the smoke pour out of one of the shafts of the mine thinking, "No it's too dangerous for us to go underground. We can't go underground and get these people otherwise we might put ourselves in danger."

Pretty soon the word got out to the guys missing's wives and girlfriends and we had the channel news helicopters flying above with cameras on the mine. Meanwhile I was getting called up all the time, "What can we do Craig? What can we do?" Unfortunately I was actually about a thousand kilometres away at the time on some other business and so I wasn't onsite to manage that. All I could do is just relay information over the phone, try to get the mine rescue guys to sort of consider ways to get these guys out. We were wondering if the smoke was actually getting down to where these guys were trapped or not. We were wondering if they were in danger or not.

So this went on for three or four hours. Panic stations. My heart was beating, I was trying to get information over the phone which is a nightmare. We had guys on site who were senior but they



weren't familiar with ventilation as much as I was. It turned into one of those things that you shake your head in hindsight and say, "We could have done that lots better!"

Anyway what happened after three or four hours when all of this panic was happening, at about midnight these four guys just walked out of the mine. They looked around and they said, "What's everyone standing around for?" The guys actually weren't even aware there was a fire. They were in a safe part of the mine in fresh air all the time. They were never in danger, but we just didn't know that.

There was a whole lot of relief after that, but there was also a conviction for me that in future we've got to do better. We've got to come up with better planning and we've got to come up with better ways to help manage these emergencies and give us more information about what could be happening. That drove my software as well. We've got features in my software now that manages those situations.

I guess in summary...What makes a successful business? Look I don't know. Every formula's different I guess. In my case the formula was - I was kind of good at software, certainly not the best. I was a reasonable engineer, certainly not the best. Together those two skills created something unique that was very rarely seen around the world and that allowed me to create something that I could develop that was unique and that could compete against other products or other people.

When you're trying to pitch yourself up in business, you've always got to be aware there's going to be someone out there better than you. In fact lots of people sometimes. But if you can pick two skills that together make you one of the best in the world, that's a unique skill that perhaps by itself will be enough to put you at the top.

Brett: We call it a unique niche, and then also working to your strengths. A bit like the old hedgehog theory from Jim Collins. Looking at what you're good at, looking at the things you really enjoy doing, and looking at what drives you economically or personally.

Craig: That's it. Look it's not the smartest guy that's always successful in this business. It's the guy that's got the motivation and the commitment to push through with it and to recognise where he doesn't have the skills to actually either don't enter into those areas or to get people involved with those skills. Don't try to do things that you're not good at.

Brett: Thanks so much for joining us today and for giving our listeners some insight into business and your career in the industry. Particularly in the mining and resources. That software piece - it's really interesting. I found it fascinating. For those listening though, if you'd like to speak to Craig about software for your business, you're more than welcome to connect with him on LinkedIn and speak to him and I encourage you to reach out. It's a theme we've talked about in these podcasts before about



building a network of people and helping you with what you need to do in your business or in your career or whatever it might be.

So thanks very much for listening to us today and thanks for joining us Craig.

Craig: Thanks Brett. It's a pleasure.

James: Thanks for listening to this episode of Resourceful - Stories From The Site. We'll be back in a month with more tips and insight from our other industry leaders. We'd love to connect with you. You can find us on all the usual social channels and our website www.resourcesunearthed.com.au. Make sure to subscribe to our podcast on your favourite platform so you never miss an episode.



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