



## Transcript for Session 034

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### **Transcript:**

Hey there, welcome to <http://chandoo.org> podcast. This is session number 34. I am really glad to talk to you again. I am here live from the Pass Business Analytics Conference in Santa Clara. Yesterday, I had the opportunity to meet the coolest, most awesome and most knowledgeable Excel MVPs, bloggers and authors. I had drinks with Rob Collie, Rick Grantham, Oz, Jordan, Sylvia, Jack, Ken and countless other people. It was such a fun thing to meet all these people. Most of them live in the US and whenever an event happens, I feel bad because I can't attend it but this time I said that I am going to go to this event no matter what! I am glad I could be here and today, I feel so fortunate to catch up with Jordan. He's just had a new book out and I am happy to talk to him and understand what this book is all about.

The book is called '**Advanced Excel Essentials**' and it sounds like the right kind of book for our podcast audience. So, I wanted to catch up with him, talk to him and understand more about it.

**Chandoo:** Hey Jordan, how are you doing?

**Jordan:** I'm great. It's great to be here and I am excited that you invited me to come on your podcast.

**Chandoo:** Thank you. I got hold of you finally! Can you tell us when this book came out and what it is all about.

**Jordan:** Sure. The book came out in November 2014 and the book is not very long. It is a short book but it is really geared towards advanced Excel developers because I don't think there are a whole lot of books for them. There are some older books for professional Excel development but this one is a very condensed book on ways on how you can use Excel in a very advanced way. And, one of the big things that I talk about in the book is that really to become an advanced developer, the most important thing that you need is creativity. So, it isn't necessarily a matter of knowing VBA and formulas, which are important and you do need to know them, but you really need to learn how to think about these problems differently and this is what this book teaches you how to do. We want to think about these



problems differently as that way we generate new insights and eventually become an awesome developer.

**Chandoo:** Wow, that's really good to hear. I think when you say 'Advanced Excel Essentials', a lot of things come to my mind. But, can you tell us a little more? Is it going to talk about formulas and VBA usage and combining them creatively or is it more of something else?

**Jordan:** It's all of the above. One of the things that I want to challenge in this book is that there are people who are very good at formulas and we always think that VBA is something else and that it is a different part of Excel. Then, there is this other side of it where people look to VBA to do everything when they shouldn't necessarily do that. So, the book is about how do we find this happy medium of where Excel features and formulas are the best choice and where VBA is the best choice and I show this to you through examples. And, the other thing that I really want to gear this book towards is that most of us receive work from someone else; we have to reverse engineer and we do a lot of that in this book. And, I want people to see this concept that I call **reusable components** which is the idea that if you make a chart once then you can actually re-use it. If you understand how it is made then you can re-use it later on once you know how to do it. That's part of re-usable components. So, I really want us to think about spreadsheet development in a different way. Everyone sort of develops in their own way but I am trying to converge these different ideas to make something great.

**Chandoo:** Yeah. I was just looking at the book. Thank you so much for giving me a copy. I was just looking at the contents. I can see that it is a really short book and so it doesn't feel like you are lugging around a 5 pound book! It is a short book but it does have a lot of powerful features explained. I was looking at the book and I was thinking that maybe discussing one of the chapters for the next few minutes is a good way to introduce this book to our audience and motivate them to probably get a copy or at least find out more about it. I see that you have lots of interesting chapters and one of them is getting input from users. This appears to be an area of concern for many of students and audience that I speak to as well. They set up this elaborate workbook but since it gets lots of input, sometimes people don't know what the best way to capture this is. So, can you throw a little light on that and tell us what this chapter talks about?

**Jordan:** Sure. This chapter is actually very similar to a wizard that I made in Excel that you referenced. The typical way in which we pull input is through user forms and I want to move away from that because there are issues with them and issues with updates. So, I want to move away from ActiveX controls and move the input form directly to the spreadsheet. So, we are going to use cells to take an input. And, I show you that you can use validation and be a lot more creative and make a lot better designed work and you can do it in a lot more modular way. So, you can make like a wizard to take user input and let them know when they are complete. And, I show you even how to store that data in the back-end. So, chapters 6 through 9 are really about how to take all these different items and put them together to



create a real advanced spreadsheet application of which input is a part. We also talk about how to build a model with that data and so these chapters build on the last chapters.

**Chandoo:** As I am looking through the book and reading chapter 6 at a high level, I can't help feeling amazed at the kind of really slick, almost like a webpage kind of wizard that you can create. Obviously the first time that I saw it on your website, I was so impressed and I had to share it with my audience in an Excel links episode. But, yeah, it is collecting data through a wizard and so it feels more integrated into Excel rather than some sort of a form or something that is coming up. At a very high level, what kind of design principles and ideas should you be using if somebody wants to design a wizard for their audience or their requirements?

**Jordan:** This is a great question. A lot of my work is about challenging conventions. So, we talk about Hungarian notation a little bit. Even if you don't know what it is, you've probably used Hungarian notation before. Let's say that you have a range and you want to make a variable for it in VBA so you'll say 'Rng' and then say what that range does. I want to move away from that because Microsoft does not even recommend that you use Hungarian notation anymore. They haven't recommended it for more than a decade. The new .NET work actually uses a camel case Pascal style. We don't have to get into that and the truth is that I don't get into it a whole lot in the book except to recommend a different way of doing it. Here is the advantage - the code is a lot more readable. For example, instead of a named range that is 'val' something - let's say that worksheet tab is named Dashboard - and then I might name that named range 'Dashboard.Input' or something like that. Then, in the code, you see what is happening. So, it is semantic because it feels like a sentence.

**Chandoo:** Can I stop you here and say that the first time that I saw this kind of naming on your blog, I thought that this is so much better; why didn't I think of this? I didn't even realise that we could use a dot in the name until that point. The moment I saw it, I started using dots in all the names all the time! Sometimes, in a live class, I may not use the dot because people might freak out thinking what this is and lose focus on the rest of the topic but I think that the usage of the dot is so much better and it makes you free from all the headache of figuring out a clever name. You can just call it whatever it is and wherever there should be a space, you can put a dot and that's it.

**Jordan:** It's true. I don't use modules a lot and so I store my procedures in the sheet objects because I like the idea that they are object oriented and I talk about why it is useful. The thing that I want to move people away from is that we've been trained to use active objects like active selection, active sheet etc. but those who have worked with these at any length know that when you run them and you're looking at the wrong sheet, you can just destroy everything. So, if we move away from it, they are not necessary.



**Chandoo:** One of the things that I teach in the VBA class that I am running is also similar. If possible, avoid talking to selections and active things all the time. Just talk to the cell that you are supposed to. So, if you writing something into A1, just say 'A1.value =' and so on rather than assuming that A1 would be selected because that is like what my MBA professor said on the first day of class, "assumptions and presumptions are the enemies of managers". That's good to know.

**Jordan:** I don't store global variables in modules. In fact, I make a new sheet that stores all the variables and I actually make them named ranges. So, we can call them 'helper.' and say what they are. This doesn't just organize them but the best part is that you can use them in formulas later. So, they are not just reserved for VBA. You can use them across in VBA if you use the shorthand bracket notation which some of your viewers or listeners know. It feels semantic; it says that I am doing this on this and it feels very easy to read it six months later. We build something and we walk away and we don't sometimes remember what we did and this actually helps in many ways to address that issue. You can use it in your formulas and the best part is that you can't change what that variable stands for except to go back into the calculations sheet and do it manually or through VBA. So, this is kind of like a level of protection for the programmers. I don't know if you have a whole lot of programmers but there is that idea of encapsulation that we protect our variables. So, this is really cool. You can use it in formulas, you can add to it or subtract from it but at least your user can't change it. So, it is an added layer of protection.

**Chandoo:** Very interesting and I would say fairly very advanced topics because I haven't spoken or heard the word encapsulation in quite a few years. I know what it means but it is not the kind of thing that you often hear in the Analyst world. They know what it is; it is the idea of keeping things that belong together but you don't really see that kind of world outside the geek community.

**Jordan:** And, so, here's what I want to say about this book. Some folks ask if they are at a level to do this. If you are using Excel every day, you have familiarity and you read Chandoo's blog a lot then the answer is yes. I am not going to throw things at you that you have likely never seen before. We don't spend a lot of time on encapsulation. We talk about it in passing because maybe if you did hear it somewhere then a light bulb goes off and you think that it makes sense. If you haven't heard of it, that's fine because it isn't important that you know encapsulation. It's important that you understand what works and what doesn't and why.

**Chandoo:** That brings me to the next question which is that there is obviously a lot of demand for people with advanced Excel skills; it is an area where a lot of attention is there although you may never see a job advertisement saying that an Advanced Excel Developer is needed. It is like a hidden skill that you must possess if you want to become one of these new fang fads that we see. For example, people say that they want a Data Scientist. What is a Data Scientist? It is basically a person that can use advanced Excel skills so that they can dig the data, find what's going on and communicate effectively.



So, if an intermediate level Excel user wants to become an advanced Excel person then what kind of pathway or steps would you recommend for such a person?

**Jordan:** That's a very good question. Here's what I'll say and I think this goes against a lot of advice. Obviously, Professional Excel Development (First Edition) is my favorite book. It was written for 2003 so if you do get it then you need some creativity to extend the examples. But, I bring that up; it's very important. The **most important skill**, and I talk about this in the book, is not being a technician and it is not learning VBA and memorizing it; it is **learning how to think about these problems differently**. That is really the separation line between someone who knows a lot of VBA but is still in sort of the intermediary stage. They feel like they can't transcend. So, you top out and you can be a VLOOKUP expert but you need to be able to **apply these problems in a very creative way**. This book will help you to do that and Chandoo's blog will help you but the most important thing is that it is a journey. So, even though people say we're experts, we are always learning new things every day. I am always surprised by how ridiculous I was two weeks ago! So, if you have that mind-set that there is more to learn and there are different ways of doing things - you don't have to agree with everything in my book - even on Amazon we have 5 stars with 5 reviews right now and so we are doing very well - but, some people said that they don't agree with everything but they saw that they could think about these problems differently and get better solutions. And, that's it. That's an internal personal skill.

**Chandoo:** I totally agree with you. It's not like a room in a hotel where you would reach; it is more about the process and the journey. I totally agree with you. One more book that I felt was complimentary to these skills is - sometimes we see all these powerful ideas but especially for people who aspire to be a Data Scientist or one of those kinds of positions where they not only need to have good Excel knowledge but also a very clear idea about some of the statistical techniques or analysis frameworks that'll help them - recently I read a book called **Data Smart** and I think that if you combine this and that book, it is really like your book would teach them all the techniques that are needed to use Excel better and do powerful things and that book would give them some of the statistical frameworks for doing regression analysis or cluster analysis or outlier analysis or things like that and then people could do a lot of powerful stuff. What do you feel about that book? Have you read it?

**Jordan:** I haven't read that but I have read a few other books. I know Conrad Carlberg wrote **Predictive Analytics : Microsoft Excel**. He has done a few analytics books and they are all terrific. Those are really great books to help you extend that knowledge. There is another book that I think is really similar. I read **Data Science for Business** and I love that book. That is like Data Science heavy stuff - k means clustering, discriminate analysis etc. and if those words scare you then you should read this book because they shouldn't be scary and he does a very high level approach.

**Chandoo:** I haven't read both of these books that you've mentioned which is good because now I know which two books to buy next. I think anytime as an Analyst if we hear words that we don't know, we



should not write them off or think of them as buzzwords and instead we should go and investigate and find out what these mean, how they relate to the work that we are already doing and how that would enhance our life. That itself is a good journey to take up and along the way you might discover a lot of interesting things. Can you tell us where our audience can find your book, Jordan?

**Jordan:** Sure. The book is on Amazon and that's probably the best place to get it. Apress, the publisher, also has it on their website. Right now, I think Apress is going to be a little more expensive than Amazon even though I'll make a little less money if you go through Amazon. I am a strong believer in buying used books if you can because you should always share knowledge. But, you can always get it on Amazon. And, if you get the ebook, I think that is actually cheaper at <http://www.apress.com>. So, you can take a look at that. And, of course it is at <http://www.barnesandnoble.com>. It isn't at bookstores at Barnes and Noble and I talked with him about this; the reason is because they have classified it as a textbook. Don't let that scare you but, generally, the way they classify things, they won't sell it because it is considered more for a textbook market. This is not a textbook; this is a fun book! In fact, one of the reviews on Amazon said that reading it felt like going to a TED Talk. So, I think that's a huge compliment. It's actually Chris Newman of <http://www.thespreadsheetguru.com> who said that and I didn't solicit it at all. He just wrote it and I thought it was a huge compliment. You won't find it in book stores for the most part; you have to get it online. I think that answers it. My site has it, Excel TV has it and I assume you'll have a link up.

**Chandoo:** Yeah, I will link to the book. Can you briefly tell us where our audience can find out more about you?

**Jordan:** Sure, absolutely. I have a blog <http://optionexplicitvba.com>. I'm finishing up a book now and so I haven't updated that blog in a long time but, hopefully, when that's done, I'll go back to it. Also, we do keep Excel TV updated. It has 20 episodes a year. Since we are in the second quarter, we've done our first 5 episodes. One of our episodes is going to be live-streaming from the conference today. So, make sure to check us out at excel.tv to find out when the next episodes are scheduled and to watch us live or to check out the stuff that we have afterward. After we tape a show, we'll cut it up and you can watch the individual segments. That's where you'll find me!

**Chandoo:** Great. Thank you so much Jordan. I am really happy I got this chance to catch up with you and talk about this really good book. I will leave a link to the book, blog and all other resources that you mentioned on the show notes page. Thank you so much.

**Jordan:** Thank you.



**Chandoo:** Bye.

**Jordan:** Bye.

**Chandoo:** That was Jordan and I am really glad I could chat up with him and take a look at his new book. He left the book on my desk as soon as he saw me and I am really glad I could read the book. Here is one more secret that I haven't told you yet which is that I am writing a book along with Jordan on Advanced Excel Dashboards. I am writing four chapters and Jordan is doing all the heavy lifting. I have finished 2 of them and chapters 3 and 4 are currently in the typing stage. I am typing them and every time I write, I can't help but feel amazed at the amount of work it takes to conceptualize and write a book. So, it is a lot of work and I am in the process of finishing the chapters. I'll let you know as soon as the book is out. In the meanwhile go ahead and check out Jordan's book. He's a pretty cool guy and many of the advanced techniques that he proposes in the book are really powerful, very creative and very useful for Analyst and Manager related work. So, go ahead and check it out and do get a copy if you like the book and support him. Thank you so much. Bye.