



Transcript for Session 005

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Transcript:

Welcome to chandoo.org podcast session # 5. This show is dedicated to making you awesome in data analysis, charting, dashboards and VBA, using Microsoft Excel. Today, I have a wonderful guest waiting for us who is going to talk about Form Controls and how to use them better in Microsoft Excel. She is none other than Debra from <http://www.contextures.com>. Debra is one of my virtual mentors and I am really happy to feature her in our show to talk about this very useful topic of Form Controls and how they can improve your user interactions in the workbook. You can download all the show notes, resources, and links at <http://www.chandoo.org/session5>.

I also have an important surprise announcement – as part of this podcast we are offering a 20% discount on Debra’s ‘User Forms Toolkit’ which is a combination of an e-book and a bunch of Excel files which can be used to learn how to use Form Controls and user form features of Excel better.

It’s not necessary to purchase it in order to listen to this podcast! The podcast itself contains a wealth of information, but if you like what Form Controls can do and you want to explore more, I highly recommend Debra’s book. You will benefit from it. We will reveal the discount code later in the podcast. Apart from the discount, you will also get a 15-page bonus guide on Form Controls from me. So that’s an extra bonus for you if you purchase this product from Debra.

I hope you will enjoy the podcast. You can download all the show notes, resources, and links at <http://www.chandoo.org/session5>. And, if you choose to purchase Debra’s ‘User Forms Toolkit’, you can visit <http://www.chandoo.org/deb>. The discount code will be mentioned towards the end of the podcast. Let’s move on and talk to Debra.

Chandoo: Hi everyone. I am really excited to introduce Debra from <http://www.contextures.com> to our podcast. Hello Debra, how are you? Welcome to the show.

Debra: Good. Thanks Chandoo for that lovely introduction, and I am happy to be with you.

Chandoo: It’s been a while since we spoke, hasn’t it?

Debra: Yes. We talked about pivot tables about a year or two ago.

Chandoo: Yeah. You did a guest lesson for one of our online classes. In fact, I think you did lessons for both Excel School and the VBA class.

Debra: Right.



Chandoo: In one lesson you talked about pivot tables and in the other you showed us how to automate them with VBA.

Debra: Right.

Chandoo: So how are things with you?

Debra: We're doing well and hoping for spring, but it's snowing here in Canada today. So that's not very good news!

Chandoo: I am so envious of you. I'm sitting in India where it's barely mid-April and it already feels like peak summer! It's so hot.

Debra: Oh!

Chandoo: In order to do these podcast recordings, I have to lock myself in the office and turn off the air conditioner, as it would add to the ambient noise. So you can imagine me sweating through this podcast!

Debra: Well, we have the opposite problem today! We'll talk fast so that you don't melt before the end!

Chandoo: Nah! I'm used to it. I spoke with Mike for a good 70 minutes and that was during the day. It's evening now and so it's slightly better.

Debra: Well that's good.

Chandoo: Can you briefly introduce yourself to our audience? I'm sure many of them know about you and your website, but it would be good to hear directly from you.

Debra: Okay. I've been using Excel since version 3 and started a website in late 2000. I got it up and running with very little information, but I've been expanding it ever since. I've also been blogging since 2008. It was a new and exciting area at that time, and I've kept it going. There's always something new and exciting in every version of Excel and we're kept on our toes trying to keep up with all the changes. I also have a consulting business and work with a few local and worldwide clients that I help with projects in all kinds of areas of Excel, mostly helping them with programming or other advanced features that they don't have time to learn on their own.

Chandoo: Interesting. Let me ask you a business question here because I run an Excel business just like you. I think we both share similar objectives about sharing information about Excel and we both follow a similar path. If I'm not wrong, a majority of your livelihood is also generated through the website.

Debra: Yes.

Chandoo: So, just out of curiosity, I want to know if consulting is a majority of your business or is it the website products and services.

Debra: It's about half and half at this point. I'm trying to build up the website a little more, as on a website you can build something and it's there – you don't have to go out to meetings with it. It works on its own in the background around the clock.



Chandoo: I think that's why I'm curious. I used to do consulting and products for a while but I realized that it became too much to handle because I live in India and most of my clients were in US, Canada or UK. So there was a huge time difference and the collaboration and communication was too difficult due to the bandwidth and other issues in India. I decided to move 100% to products and for almost a year now, I've stopped doing consulting work. So I was just curious to know how it was for you.

Debra: I don't take on much in terms of new projects. At this point, it's about building up the products that I have and build the business by making the existing products better. I have the same goals that you have!

Chandoo: Do you do any live classes or training?

Debra: No. I do video recordings and that just lets people around the world participate when it's convenient for them, rather than trying to organize everything based on North America Eastern time. I've had success with putting videos out there and letting them use them when they have a few spare minutes to learn something new.

Chandoo: Excellent. What made you choose Excel to focus your career and life on?

Debra: Wow, that takes me way back to the past. I think it was a natural progression. When I first used Microsoft, I mainly used Microsoft Word and did a lot of advanced things for my clients, setting up very long documents, indexes, links and tables of content. I was doing some Excel for myself and was asked to teach some classes – so I moved into Excel that way. I also do a lot of Access work.

Chandoo: What profession were you in before this?

Debra: I worked at a university for about 10 years. I worked for student services in a variety of departments (library, technology areas). I've always organized things and Excel is a great tool for that.

Chandoo: Excellent. When did you decide that you are going to quit your job and shift completely to Excel?

Debra: We actually moved way out to the suburbs as housing was cheaper there and it became too much because I had an hour long commute to work and I had young children. So I decided that I had enough skills to build some business on my own and bravely jumped in.

Chandoo: Was this sometime in 2000 or before that?

Debra: It was well before that – it was in 1985!

Chandoo: Wow. What a beautiful and bold decision. I think I was about 4 years old in 1985.

Debra: Me too! I was about 4 years old! My children were 2 and 3 respectively!

Chandoo: Ha ha! I think one commonality here is how children push us over the edge. When I had my twins, I was actually deputed to go to another country and spend a lot of time at the client location – so I decided to shift to Excel and see what happens!

Debra: Right. We got a Macintosh in 1984 when they first came out – so that was our home computer and our brave new world. I used Microsoft Word on it. I didn't have twins – my doctor thought I might



be having twins when I had my second baby, but he just turned out to be an 11-pound baby! It was just easier to deal with one, even though he was a big one!

Chandoo: You're definitely right.

Debra: Anyway, I started on the Mac and moved over to Windows around 1991 because there just wasn't enough Mac business to sustain. (At that time) I couldn't afford the time and cost to support two different systems, so here we are in Windows!

Chandoo: When did you become an MVP?

Debra: In 2001.

Chandoo: Is it your 13th or 14th year as an MVP?

Debra: It can't be that long! It's a lot - I've run out of wall space for the certificates!

Chandoo: I think they've done a good thing by replacing the yearly certificate with a block with the year number on it which you can just slide down.

Debra: It takes a lot less space - I've got one of those. I remember going to the first summit in November 2001. It was soon after the September 2001 events and it was a bit scary flying anywhere at that time, but I couldn't miss my first summit, so off I went!

Chandoo: Yeah. I've always wanted to go to the summit at least once but something or the other comes up every year. Hopefully I'll be able to attend it this year and meet you all there.

Debra: Even I've wanted to go for many years but have always had conflicting events. Maybe one year we'll all get together.

Chandoo: Can you tell us a little bit about the current books and projects you're working on?

Debra: I'm working on some new functions things and I've recently finished a multiple selection data validation tool that uses list boxes. My user form course was fairly recent and I'm working on improvements for that. So it's all keeping me busy.

Chandoo: Are you writing any books as well?

Debra: No. I haven't done anything since the pivot table books that I did. I'm still recovering from that!

Chandoo: Why do you say that? Was it a lot of work?

Debra: I actually did two that overlapped - so I was kind of still working on one, when I had to get started on the second one. It eats in to your time and its very tiring (even though it seems like a glamorous job).

Chandoo: What surprises me is that some people do this effortlessly while others feel that it's an enormous task. At least I feel that writing a book grinds you completely.

Debra: Yeah. I don't know how people can do it without getting tired.



Chandoo: I went to meet Bill Jenin at his house last summer, and he's like a machine that turns out books. I don't know how he writes so many books. He has a spreadsheet tracker built to just keep track of the book progress. It's broken down by topics and individual chapters and he gets to know how much percentage of it is done. It's plugged into the word manuscript and it reads all of that. He just cranks out books! Between now and the time I met him last summer, he must have written 3 or 4 books already.

Debra: Wow. He doesn't have little kids like you do! Maybe that's the difference.

Chandoo: His kids are in college.

Debra: So he has to write books to pay for all that!

Chandoo: Rob and I asked him if he wants to do the same thing after 5 years and he replied, "Yeah. I want to write books even after 5 or 10 years!" So that's something.

Debra: Good for him. I would be exhausted. I did use Excel to keep track of all the chapters when I was writing books, but that was just for my 2 books (not for 40 or 50)! That's pretty awesome if he's getting all that done.

Chandoo: Obviously he had to have his own publishing company with so many books. It just amazes me how quickly and efficiently he can turn out books and keep writing in the same exciting way for every new book.

Debra: Yes, he's very enthusiastic about it. It's great to see.

Chandoo: It's good. Let's talk a little bit about Form Controls now since that's our topic for today. Can you go ahead and tell us what Form Controls are and why they are used.

Debra: I use Form Controls sometimes on a worksheet with data validation where instead of just having an incell drop down (with text that you can barely read sometimes), you can use an event on the worksheet to make a combo or list box pop up. You can control the font size and the number of items that appear in the list. So it's easier and it also does auto-complete for you (which Excel doesn't). So even just using them on the worksheet can be an advantage if you're able to use programming. Some people work in environments where that is discouraged and they have to keep the workbooks free of macros - but, if you can use them - it's a nice tool even on a worksheet to make some things a little bit easier. I also use them in user forms where you just create a blank canvas and add combo-boxes or text boxes and some buttons to create a nice way of collecting information and guiding people through steps even. It's like some of the wizards we used to have in Excel where you start and it shows you what to do first and then next and next. So it's a good way to control what people are seeing and doing, which you need to do sometimes, depending on who you're building the workbook for.

Chandoo: I agree. There are two things in Excel - 'Form Control' and 'ActiveX Control' - and what you just explained is about the 'ActiveX Controls', isn't it?

Debra: Yes, you can use Form Controls as well but you don't have too many options in Windows - you can't change the font size etc. I understand that they have a few more settings on the Macintosh and so you can change a few more things there. I posted a link on my Excel roundup last week where Professor



LeTowns had converted one of my macros to enable Mac users to use it and she used Form Controls because you can't use the ActiveX Controls there.

Chandoo: Yeah, ActiveX is essentially a Windows component.

Debra: Right.

Chandoo: How would you explain Form Controls and ActiveX Controls to someone who has no idea what they are and why they should learn them?

Debra: Well, they do have some advantages that you can't get on the worksheet - like the appearance of things and interactivity. I use data validation frequently and I think that a lot of people like to have those drop-down lists. If you have a list of 100 products that you want people to enter in an order form, a data validation drop-down will only allow users to see about 8 options at a time and they'll have to keep scrolling down and they can't start typing to go to the product starting with 'T' for example. There is no shortcut while you are using that built-in data validation. You either scroll or just type the whole thing and hope that you got the product name right, and if not, then go to the product list. But, with a combo-box or a list box, you can automatically go to something if you start typing. So if I type 'T' in a combo-box it's going to show me the first product name that starts with a 'T', and then if I type a 'Ta' it's going to show me whatever is the first match for that. So it can make things a lot quicker if you are working with long lists or long names – a combo-box will just make the data entry easier. However, there is more work in the background because you are using programming to make it happen.

Chandoo: That's right. This is very interesting and I am sure that people who are building workbooks for others will find this very useful. If I'm making something for myself I won't bother scrolling through hundreds of products, but if I'm making something for a client or the CEO of a company, then you really want it to be usable and user-friendly so that they can click and get it done and see the output or report that they want. That's where these controls shine as they make your workbook approachable and easy to use.

Debra: Whatever frustration levels you can reduce for people the happier they will be. Controls make it easier and less prone to errors. Both the people entering and collecting the data are going to be happy.

Chandoo: Excellent. What are the different types of controls that are available in Excel?

Debra: The ones that I would use most often on a worksheet would be the combo-box and the command buttons – so you can just click a button which would initiate a macro to do something like save a file, or clear a filter or reset the fields or something like that.

Chandoo: Just to understand these things better, can you explain what a combo-box does? Does it let you select an item from a list of items?

Debra: Yeah. It looks like a little box that you can type in and there's an arrow at the side – so you can either start typing or you can click the arrow to see all the options. As the developer you can set it to show 12 items at the same time (for a list of months for example), instead of just showing 8 items when they click that arrow. So you're going to save them a little bit of time in scrolling, if they're trying to enter months like November or December, as they won't have to scroll all the way down – they can just see it and click on it and be done.



Chandoo: What process do you have to follow to set up a combo-box on a worksheet?

Debra: You need to be able to see the 'Developer' tab on your ribbon to do that. It doesn't show automatically – you have to go in to the File-Options menu and then select the checkbox for the 'Developer' tab in the customize ribbon options. Once you can see the 'Developer' tab, you will see a 'Controls' group and a little drop down arrow for 'Insert', which lets you see all the Form Controls. And then there's really a matching set of ActiveX Controls. So they look pretty much the same. The ActiveX Controls are for Windows only and have a few more formatting features that you can apply as well as a few more properties that you change. The Form Controls are a little simpler; you can't change some of the fonts and sizes (at least on Windows) but it does give you the same functionality – whereby you can type in a combo-box or click the arrow to select something. There's also just a text box where you can put a box in the worksheet and somebody can type in it. I don't use that very often because I feel they can just type in a cell instead.

Chandoo: Yeah. The text box is essentially a shortcut to the cell.

Debra: Right! I don't think I ever use that on a worksheet. Then there are things like a check-box or radio buttons that you can set up to make it easier for people to check a 'yes' or 'no' or the 3 products that they would like to include in their order. – Just ways in which people can select things easily from a short list of options. There are also scroll buttons that let you zoom up and down a list. – If you want people to enter a number between 1 and 10, for example, you can give them a little scroll bar where the numbers roll up and down.

Chandoo: Let's talk about those things a little later and come back to the combo-box for now. I will provide a set of instructions in the show notes to learn about the 'Developer' tab. Once we have the combo-box in the Developer tab, how do we get it on to the spreadsheet and link it up?

Debra: Okay. Once you're on the Developer tab and you click the arrow for Insert – I usually use the ActiveX Controls – if you point to them, it tells you what each one is. It's usually clear from the picture, but you can just hover over it and it will tell you. So if you click on the combo-box it activates that tool and your pointer changes to a little crosshair that tells you where you are going to start drawing. You can either click on the worksheet where you would like the combo-box, and it'll add one which is the default size. Or if you have a specific size in mind, just drag to draw the shape of the rectangle that you want, and once you let go of the mouse you've got a combo-box. Once it's there, you have to tell Excel what you want to see in that combo-box; i.e. what list should appear there. You can also tell Excel where the value should go when you pick something – should it go to a cell somewhere on a hidden worksheet or on this worksheet, so you can get the data that someone selected.

Chandoo: Okay. The process, once you have the combo-box on the worksheet, is to tell it where the source data is and where the output should go.

Debra: That's right.

Chandoo: This source data would typically be a range of cells or a named range, and the output would be linked to a cell which we often refer to as a 'linked cell'. So you know that this cell is linked to a control – when you change the control, the cell gets updated.



Debra: That's right.

Chandoo: When I demonstrate these controls in a live class or to a group of people, some people don't get them immediately because they tend to wonder why they have to go through all these steps when ultimately the output is in a cell. Then we show them that the beauty of this whole thing is because of the way Excel behaves – if a cell is updated either by manually updating the data or something else triggering the change – any formulas or any charts linked to that cell will also update. So this really makes people think that the output (a chart or report or anything) is changing by changing the combo-box. Once you make that leap, it becomes clear why this combo-box does what it does.

Debra: Right.

Chandoo: I remember one class in which people repeatedly kept asking why I had a scroll bar. Once they understood what it was doing, in a demonstration, then they realized what it was doing.

Debra: Right. Ah ha! If you have it linked, you're not using programming or anything for this simple kind of combo-box. – It's just linked to a cell and when you change 'this', it puts new information 'there', and it changes your chart and whatever else is attached to that linked cell. These simple steps can be used without programming for a lot of things.

Chandoo: That's right. You mentioned that you prefer using ActiveX Controls instead of Form Controls. – Can you explain how a Form Control combo-box behaves as compared with an ActiveX combo-box?

Debra: The main difference is cosmetic. You can't change the font size in a Form Control, whereas you can set the ActiveX Control combo-box to have a larger font size. Since Form Control font sizes can't be changed, they end up looking almost as small as the data validation drop downs. If you're zoomed down to 60% or 75%, they can be hard to read. They both have auto-complete, so it fills in as you start typing. – That's an advantage over data validation. What mainly drives me to use ActiveX Controls is the fact that you can't change the font size of Form Controls.

Chandoo: Are there any things that we should be aware of when we are using ActiveX Controls versus Form Controls? For example, I believe that if you use Form Controls in a worksheet, save it, and send it to a colleague, they will be able to work with it provided there are no macros linked to cells and everything is driven through formulas. Whereas, if you place an ActiveX Control and even if you don't have any VBA on it, wouldn't it throw up a warning or something like that?

Debra: I would have to check that!

Chandoo: Okay. At least that's what I thought was one of the limitations of Active X Controls. Maybe I'm wrong, but I remember seeing some warning messages saying "This file contains ActiveX controls. Do you want to enable them?" or something like that.

Debra: Okay. That would be easy enough to check. I'm sure people are checking right now to see if that is what happens!

Chandoo: I'll check about that and post it in the show notes.

Debra: Okay.



Chandoo: That's clarified. If you use an ActiveX control and put a macro behind it, then it would throw the usual macro warning. But, if I remember correctly, if you have an ActiveX control even without a macro behind it, it will still throw a warning. That's what I thought but I may be wrong. I will check that and put it in the show notes.

Debra: I just tried it, closed and re-opened the file, and didn't get a warning. But, I'm using Excel 2013.

Chandoo: Yeah. And it probably depends a lot on the Trust Settings and other things. It's your file and you're re-opening it, so technically you shouldn't get a warning there because it is on the same Windows where the ActiveX originated.

Debra: Right.

Chandoo: A combo-box is a standard Windows ActiveX. But when you're putting an ActiveX of a Flash plug-in or a movie player or audio player, then it is bound to throw some sort of a warning. I'll check that and post it in the show notes.

Debra: Okay.

Chandoo: That's how we would set up a combo-box and link it.

Debra: Right.

Chandoo: Now let's talk a little more about the programmability of these things. What kind of things can one do when you have a Form Control combo-box versus an ActiveX Control combo-box?

Debra: I don't usually put in any programming if I've got a Form Control combo-box. I use that just to show the drop-down list. Usually, if you're putting a button on the worksheet, you want something to happen when people click the button. And people would be quite disappointed if nothing happened! So you can add programming with those. If I insert a Form Control button (Developer tab – Form Controls – and the first option is a button) on the worksheet, it pops up right away and gives me the opportunity to assign a macro to that button.

Chandoo: Yeah, the natural expectation with a button is that if you click on it, something happens.

Debra: Right.

Chandoo: Whereas a combo-box, by definition, is just for making a selection and assigning it back.

Debra: Right. So for those simple combo boxes, that's all people expect to happen. - Just click, select and have that data appear somewhere on the worksheet. Whereas if you've created a button, it usually has some text on it ('click here', 'close', or 'save') and in the background there's a macro that's running because you've assigned a macro, or you've put some code if it's an Active X button (so that the code runs when that button is clicked).

Chandoo: Let me tell you how I use buttons since we're talking about buttons. Actually, I've never inserted a button control on the worksheet because most of the files I build are interactive charts or dashboards where it's usually the selection itself that triggers the change. We don't need to click on something to make something else happen. That kind of scenario comes in handier when you are



building a form where you can enter data and save it to a background table or something like that. In that case you want the button to tell the template “Okay, I’m done entering. Now go and do your job.” Whereas in a dashboard or report kind of set-up, you just change the month or product or department name, and you would expect that the chart or table or output would get refreshed.

Debra: Right.

Chandoo: Whenever I want a button kind of behavior, I usually choose a drawing shape instead of the typical ActiveX or Form control buttons; because they let you choose your own fonts, colors and styles. So I have a preference towards that. I just put a shape where I want a button kind of thing.

Debra: Yeah. I do too. They’re much prettier, people like those bright colors and they catch your eye a lot better.

Chandoo: Yeah. It’s almost like the Web 3.0 or 4.0 or whatever it is that’s running right now.

Debra: They’re rounded, shiny and very attractive.

Chandoo: That’s right. Interesting.

Debra: Your clients feel like they’re getting more for their money if the button looks better!

Chandoo: Mike was talking about pivot tables in his podcast - about how if you click the summary it shows the underlying values – some clients don’t know that this is part of Excel –I don’t know if Mike really does this but he said, “That one’s extra! It’s fee!”

Debra: Yeah. The pivot table’s free, but the double click costs \$100! It’s all magic if you don’t know how it works.

Chandoo: It surprises me, I’m sure some of your friends have told you the same. When I chose to focus my entire career on Excel - write about it, talk about it and train people on it – a few of my friends were really surprised. They said, “In Excel? That’s all you’re going to do? How much more?” I mean how much can you mention about it. So it’s always there to surprise you. The nature of it is such that it has infinite possibilities. You never run out of them.

Debra: Last week I was reading about these developers who are coming up with an alternative to Excel because Excel just has too many features and it’s too complicated. And I thought, “No. that’s just the total opposite of the truth.” There aren’t enough features; we need more features to do all the things that we want it to do magically.

Chandoo: Yeah. A combo-box that would let you change the font color!

Debra: There you go! All kinds of fun. We need conditional formatting in combo-boxes. - I’m sure we could come up with a hundred ideas right now.

Chandoo: In fact, since we are talking about combo-boxes, let me tell me what one of my online Excel School students asked me about a particular problem. So one day I called him because I didn’t understand what problem he was facing. He said that he’s managing a retail distribution channel for a company and they have hundreds of shops to whom they sell this product, and he had built a



management report with all the data. His biggest challenge was successfully selecting one of these names out of a hundred names. The data validation was a flop because it would require a lot of scrolling in order to pin-point the name. And you tend to miss it if you're scrolling a little too fast, and end up just scrolling up and down without successfully finding the name.

Debra: Right.

Chandoo: The combo-boxes were also not of much help because they were not doing what he wanted. He wanted some sort of an auto-complete feature and he didn't want to use ActiveX. Until you just mentioned it, I didn't even know you could do an auto-complete in a regular Form Control. So, I'm going to test it after the podcast. He wanted some sort of a way where he could specify the first letter of the vendor name and a short-listed list of names would show up in the drop-down for selection. So you can see the problems people face. We had to build this by writing different formulas, but now that you mention features that could be added to Excel, this could be one of them right?

Debra: Right.

Chandoo: You filter the list and then you select.

Debra: Yeah. People want to get where they need to be quickly and not mess around with a lot of time-wasting features.

Chandoo: Apart from the combo-box and the command button (which will trigger an action), what other controls do you frequently use?

Debra: Those are the ones I use most. I have also used the slider, the scroll bar, and that's often in conjunction with a chart or a date range somewhere – you can move this box across and it will scroll through a list of dates that I have hidden on another worksheet – so as you slide up and down, it will go from January 1st of this year down to December quickly. So instead of trying to select a date, you're just sliding – you slide over and it quickly shows you that month, and (as you mentioned) that's handy if you're using a chart or a dashboard. The scroll bars take up a little bit of room, but people are familiar with sliding to scroll through a set of numbers or dates. So I use the scroll bar to create a slider for people to use.

Chandoo: Yes, I use scroll bars quite often. In fact, I use them for charts, dashboards and primarily for setting up a scrollable window kind of thing. Because even though Excel itself can show a million rows, but in your dashboard you want to have these small windows where you can show a snapshot of information. - When you are scrolling you can show more of that. That's one thing that I often use in my output or report. Do you also use check-boxes and radio buttons?

Debra: I do use them sometimes. I find them a little bit frustrating sometimes because you don't have much control over the text size. So sometimes I just use the check-boxes and then either use a text box, or something on the worksheet, to show the label.

Chandoo: I do that too because I face the same problem with them. They are good for what they do, but the labels are not very good and they don't really blend with the rest of your overall design because you can't change their color or their font. So, I remove the text and I add a text box, so that it's easy to customize the way they look and behave.



Debra: Yeah. I've even had people say, "You know I put a check-box and they make a long label and they don't wrap around" when they want it all to line up nicely. Just get rid of the text and create your own. And, I would just like to make a correction that you're right about those Form Control combo-boxes - that we don't type in those - we just click and select. So, one for Chandoo there, and zero for Debra!

Chandoo: Not at all. In fact, I was really curious to test that. I made a note on my notebook because I wanted to quickly send an email to that guy and say, "Hey, there's a better way to do this. We don't have to write all those formulas."

Debra: Let's just rewind, and I'll pretend I never said that earlier.

Chandoo: Nah, it's okay.

Debra: I just never use those because of the font issues. I have a couple of vague memories about them which are incorrect. That's another reason to use the ActiveX combo-box because you can type in them, and for a long list you're going to get through them a lot faster.

Chandoo: Excellent. That's nice to know. In fact, I could even suggest it to my student to use an ActiveX combo-box and forget all the other things. Thanks for checking that.

Debra: Just working away here in the background! Speaking of that combo-box, one of the examples that's on my website is dependent data validation – you select something in one data validation list – for example if you pick Canada, then in the next cell when you're trying to pick a city – a little magic happens – so that list is dependent on what you selected in the first. So, if you selected Canada, then only the Canadian cities show. We usually do that with just a secondary list of Canadian cities – so once you pick Canada, it'll show a list called 'Canada cities' instead of showing all the cities. So that's another option. And you can also build combo-boxes on top of that with some programming. I've got an example of that as well. So once you select here, that second combo-box or data validation list just shows a shorter selection.

Chandoo: Interesting. That would be an excellent resource for the people who are tuning in to the podcast. I will link to that in the show notes so that people can grab it. That reminds me that recently Jeff (who is also one of our guest authors) also spoke about this, and I think he mentioned your article in that. As I said earlier in this call, data validation and pivot tables seem to be the two things that come to my mind when I think about Contextures. I am sure that are lots of details about all other aspects of Excel on your website, but these two jump into my mind.

Debra: I started with these two early and when you find a new technique you want to share it with people. The dependent drop-downs are something that people are looking for. Because we are used to going to online forms, and when you pick your country, you will see the areas from your country in that list. So people want to do that in Excel as well. And it can be done - either with the kind of combo-boxes we're talking about or just plain old data validation.

Chandoo: Talking about other form controls, do you ever use list boxes?

Debra: Yes, with the pop-ups that I use. But that's with programming; it's not just a combo-box sitting on the worksheet. I use a hidden ActiveX combo-box that's hidden, and then it just appears when you click on a data validation cell. Recently, I started working with list boxes for that because you can set up



a list box that is multi-select, so that instead of just making one choice from that, you can change it so that it shows check boxes down the left hand side and then you can click as many as you want. It's a quick way for people to say a lot of or all the options for a shorter list and just check the ones they want and away they go. So you don't use list boxes in every situation but they're especially handy if you want people to select multiple items.

Chandoo: Okay. Do you have any examples of these kinds of list box techniques on your website?

Debra: Yes, I can send you a link for that page.

Chandoo: That'll be super.

Debra: People want to be able to select multiple items in a data validation cell. In data validation, if you select something and then go back and select another thing, it just overwrites your first choice. So I've got some programming that'll just keep adding your selections.

Chandoo: I remember seeing that on your site a while ago.

Debra: Right. A list box is an even quicker way to do that. You click on that cell, it opens up, and you can check 3 or 4 things. It just puts all your selections into that cell because of the programming. It's just something that you don't need in every situation, but a lot of people have a need for multiple items in a cell and a list box is a great tool to do that. There's a little tutorial on my website for that.

Chandoo: Okay. I will link to that in the show notes. Before we talk about other aspects of controls, is there anything about the compatibility that you'd like to mention? Are these controls compatible with all modern versions of Excel?

Debra: I don't know of any issues with the controls themselves because they've been around and haven't changed as long as I've been using Excel (which is about a hundred years, I think!). Of course it depends - if you using programming to run a macro that isn't available in an older version, then that would be an issue. However, the controls themselves (as far as I know) are backward compatible.

Chandoo: Yeah, I would think so. The Form controls and the ActiveX controls (whatever is shown in the Developer tab by default) are all backward compatible. They work beautifully in any version. The only thing that we need to be aware of is that any macros that you write may not function in the same way if you have upgraded to a newer version of Excel and not taken care of any changes.

Debra: And, as we've mentioned, if you're sharing this with Macintosh users then you have to use the Form controls.

Chandoo: That's because Mac doesn't have ActiveX controls.

Debra: Right.

Chandoo: That's one reason why I tend to shy away from ActiveX controls. - At least on the website, where I have to demonstrate a technique and provide links to play with it, most often I don't want to see comments that say "This doesn't work on my computer."

Debra: I know.



Chandoo: I tend to play safe. I don't even put macros in my workbooks most of the time. At least for a long time, I shied away from macros. - "Not for me!"

Debra: Yeah, if you can do something without a macro - great. But if it takes a lot of crazy maneuvers to make something happen without a macro, then maybe you just have to go the macro route. Avoid them if they are not necessary, but use them if they are.

Chandoo: What other interactivity techniques do you usually use? With the newer versions of Excel, there are slicers, timelines and hyperlinks. Do you use them often and what do you feel about them?

Debra: Yes. You have to be, of course, aware of what versions your clients are using and fortunately now, most clients have moved up to Excel 2010 and many up to Excel 2013. So you can use the slicers and I love using the slicers, both on the tables and pivot tables in Excel 2013. That's a nice incentive to upgrade for people who use tables. Those are great. I'm working on something for a client right now where I am using slicers and they almost have that same kind of dependent feature. So if you select a country in one slicer then the relevant cities or states would move up to the top of the next slicer. Whereas in a pivot table, if you make a selection in one filter at the top then the next filter still shows you all the options instead of just the relevant ones. Slicers can make it easier for people to quickly pick what they need from 2 or 3 different slicers.

Chandoo: Yeah, that's right. I really love slicers. They provide the quick interactivity that people want, in a very friendly and approachable way. And they just work - you don't have to think about which cell to link or point to. None of these things are required to learn them. You just put a slicer for a city, product or category and it just shows all the unique values in that, in alphabetical order or whatever other order you prefer. And there you go - you can use it with regular pivot tables or with PowerPivot. It blends beautifully with the Excel layout. The only problem I find is that some of these slicers can get really big, especially if you are talking about a slicer like countries or cities - there can be hundreds of values there.

Debra: Right, and you're kind of counting on the user to click on that country at least before they find a city, as that'll at least narrow it down for them. - Or, you can do country and region and city, if your data will support that. I agree that you can have a lot of real estate eaten up with slicers. But if you have the room then they are certainly worth using. However, if people are using Excel 2007 and earlier, then those aren't available. They'll just see kind of a blank rectangle when they open the file.

Chandoo: That's right. Do you also use hyperlinks?

Debra: Yes, I often use a hyperlink especially if the file doesn't have any other macros in it. It's just a quick way to go back to a menu sheet (by placing a link in row 1 or cell A1) where they can then link to a different sheet. It takes up very little space - just click here and you'll go back to the menu sheet and go somewhere less (without having to use macros).

Chandoo: I love them and I think they are really powerful and easy to use. You don't even need the kind of set up that is needed for a slicer to use these things - i.e. you don't need a pivot table or a table or anything. They are an easy way to fake interactivity without really doing anything. For example, you can set up three different charts that show three different types of summaries and create a menu with hyperlinks. - You click on it and it jumps to that particular chart or page. So you create that interactivity even though it's not really there - it's just a bunch of links making you jump around.



Debra: Right. And you can even put them on a shape so that it looks like a button - it's just a hyperlink, not a macro. It just makes you click what looks like a button and it takes you to a different sheet, without a macro in the workbook.

Chandoo: That's right.

Debra: That adds a little glamour to your workbook without having to do any macros. - And people don't have to enable macros just to have that one little button work.

Chandoo: Obviously there are lots of things can one can do with Form controls and all these new interactive features that Excel has to offer. I want to ask you what some of your favorite tips are when it comes to using these controls.

Debra: I think just make it clear what the control is for and how to use it - i.e. where you have to click, what it's going to do and where the information is going. If you just have a bunch of combo-boxes or vague buttons or check boxes, then people are going to be more confused than if you just stuck with the worksheet and put your information on there. So just make sure that things are clearly labeled and well laid out, so that they can see what they should be filling in in the first part of the screen. Don't have things hidden off to the side that nobody notices at first, and then things don't work because they haven't clicked a button that was over in column AX. Keep your users in mind and after you build a little bit of it – just be the user, and see if it's going to be really easy for people to use and is it really an improvement over using the worksheet. And if it's not, take it off there. Just go with the basic worksheet - fill in a cell and lock and unlock things. Don't add things just to look good. Make sure that they are really adding some value to the worksheet.

Chandoo: That's really a beautiful way to wrap up the discussion on Form Controls. Most people (myself included) tend to overuse Form Controls (or any other new feature for that matter) when they learn about them. - Because it's there, and you want to showcase that you know how to use it! But, in the end, all of these should take a back-seat and the user should be in the foreground. You should let the workbook address their needs. If it's not helping them enter data faster or get the results faster, then there is no point using a control, a macro or anything for that matter. So, yes, that's really a beautiful and simple way to conclude our podcast. Now, I want to ask you, how can someone who is new to Form Controls and spreadsheet interactivity learn more? What kind of resources do you suggest?

Debra: Well, I've got some tutorials on controls for the worksheet which is what we've been talking about today. And, I've also got some tutorials and a product that covers User Forms, which is another place where you can use controls. It's a whole form that will pop up and let you put all these controls in and send data back to Excel.

Chandoo: Can you tell us a little more about this User Forms product? What kind of things can a person learn if they get it?

Debra: It goes through a couple of step-by-step projects, and both of those are designed to collect data that gets sent to a worksheet with a very simple table flat database storage (not like an Access database, but just something where you can collect sales orders or parts inventory). Instead of having people go that sheet, where they might mess things up, you can keep that hidden. - You can click a button on the main sheet which would open up this user form that has some combo-boxes, text boxes and buttons like



we've discussed - and then when they fill things in and click save - it then takes that data, with a bit of programming, and puts it in the first open row on that database sheet. So you're protecting your data to some extent. I mean people can always mess things up if they're really determined to, but it helps people from accidentally overwriting something or messing something up.

Chandoo: I totally agree. This is also one of the temptations of Excel. - Because it can do things, people want to use it for everything. Ideally, if given a choice, I would use a database if I want to collect data. But, most of the time, you don't have the luxury of using a database or you probably don't know how to use one, even if you have MS Access or SQL server lying with you in your computer. Whereas, you feel familiar and comfortable with Excel when you see it. So many people try to use Excel to not only analyze data, but also to collect and maintain data. And most of the time the headache begins when you collect the data but something is messed up somewhere. You don't know what went wrong - somebody deleted a column or one of the rows is accidentally gone - and the totals don't add up or you get something other than what you were expecting - these are big problems that people frequently face. So it's always a good idea to use a form to protect the data. In fact, Excel has a built-in table form kind of feature that would let you do this.

Debra: Yes. The dis-advantage of that one is that you have to be on that database sheet for it to open. You can't have that on another sheet and open it. If your goal is to have that sheet hidden from them, then that lovely built-in feature isn't going to work. You're going to need a couple of more features!

Chandoo: Ha ha! We're back to the same place where we said, "Excel is not too complicated - come on!"

Debra: No, it's not complicated enough!

Chandoo: Again, I just wanted to say that this 'User Forms Toolkit' which contains the e-book and the workbooks, for practicing the techniques, is a lovely product. Anyone who is facing these kinds of challenges - how do I build in interactivity, or how do I collect and maintain data in my workbook without letting somebody accidentally delete or mess up things for me - these are real challenges and anybody facing them would save a lot of time and feel a lot better if they go through these techniques and learn how to set up user forms, and collect and maintain data. I am going to mention a link to this product in the podcast and I just wanted to say that anybody who goes through the link that I mention - since I am an affiliate for Debra, she will probably pay me a commission when a sale happens!

Debra: Of course!

Chandoo: It's not a very expensive product. It's \$30 for the e-book and it's really generous of Debra to provide a discount code for Chandoo.org podcast listeners. The code is chandoo. When you click on the product link and use this code, you will get 20% off. So you will save a few dollars and you can have a coffee or beer on us! And you'll be able to use 'User Forms' to save a ton of time at work. Is there anything else that you'd like to say to our listeners, Debra?

Debra: No, I think we've covered all the basics and I hope we have interested people in at least giving this a try, either on the worksheet or (if you're more ambitious) you can try the User Forms as well. The controls work pretty much the same way there, but you're just creating an even fancier environment that you can show people, and have an even greater degree of control over how they move through the



data entry process.

Chandoo: Thank you so much, Debra, for joining us. I really appreciate your taking the time and sharing all this detailed and beautiful information about Form Controls and ActiveX Controls - how to set them up, how to program them and how to use them better. I am sure many of our listeners would benefit from this beautiful resource that you've created on 'User Forms'. Thank you so much for joining us, and I hope to see you another time on our podcast

Debra: Thank you very much. It was great to talk with you.

Chandoo: Thanks Debra.

So that was Debra. I hope you liked the information that she shared. As you can see, User Forms are a really powerful feature of Excel and I am happy to get a chance to talk to her and explore various features of User Forms, various kinds of scenarios where you can use them, and the kinds of things you need to be aware of and keep in mind, when you are deploying User Form Controls in Excel.

Thank you so much for tuning into the podcast. I hope you enjoyed it and I'll see you again in the next episode. Bye.