



Transcript for Session 025

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Transcript:

Hey podcast listeners, welcome to session 25 of chandoo.org podcast. This podcast is dedicated to making you awesome in data analysis, charting, dashboard reporting and VBA using Excel.

Thank you so much for joining me today. I am really glad to have you with me to share some of my ideas, tips and knowledge as well as some of my personal life with you. That brings me to this question - "Have you see the Disney movie name Frozen"? I know I'm asking this question more than a year after the movie released but we recently had the opportunity of seeing it at home and my kids, my wife and I really loved it. I couldn't get some of the songs out of my mind! I'm always humming them at the back of my mind and I think it's a very beautiful movie. So, if you get a chance, watch it with you kids and I am sure they'll love it. My kids just loved the movie. Of course, as soon as it was over they said "Can we watch the cars movie again!" You know the Pixar movie made some time ago with cars that talk and have their own lives. My kids are really big fans of that movie. They are such huge fans that we've probably seen that movie hundreds of times by now! Every day at lunchtime they watch a little television and they always ask if I can play the cars movie for them. By now, my wife Jo and I remember all the dialogues of Cars and Cars 2. I am not buying the planes movie which they have recently released because I am afraid my kids will get hooked on to it and they won't let us watch anything else on TV.

Moving on, today I have an interesting topic for you. This topic is named "**Sexy on spreadsheets, ugly on printout**". This happens all the time. You prepare a really beautiful, lip-smacking, awesome looking workbook but your boss or clients or somebody in your office wants to print it out and discuss it in the board room. So, you take a print out and it doesn't look anything like the way it looks on screen. Why does this happen? How come we spend a lot of time and we understand how it works on the Excel screen but we forget the last part of the process which involves setting print formatting settings and optimizing a workbook or dashboard report for print.

So, in this podcast, I am going to talk about some techniques, tips and ideas that I have been using all my life to make sure that not only do my workbooks look good on screen but they look good printed as well. This has a couple of sections; there are about four sub-topics in the podcast. The first one is about print settings that just walk you through some of the **common printing options** available in Excel. The second one is a topic on **unprintables** where you have a lot of elements in your workbook that are good on screen but they don't make much sense when you want to print. The third one is **proofing**, i.e. before you actually print a document or a workbook it is always a good idea to proof it. How do you proof without wasting paper? The final one is **printing what is not on the screen**, i.e. the opposite of unprintables. Sometimes you don't see it on screen but you want it to be printed. How do you that? These are the four topics that we'll discuss.



Now let's get started with the primer of printing options. Excel has a ton of features and it has a lot of features when it comes to printing. You can really fine tune and optimize every little aspect of printing. But, I'm not here to bore you with all the finer details of how Excel can print and the things you can do. Some of my favorite ones are as follows. When you prepare a workbook, you have the entire screen and you have a million rows and several thousand columns. So, we build our worksheets, reports or dashboards as if we have unlimited real estate. You're building it but when it comes to printing, it doesn't make sense if a report gets printed on 75 pages. Nobody has time to read such a long report and the structure of printouts makes it impossible to get one picture by looking at 75 pages. When you have 75 pages, you'll most likely put it in a folder or you'll staple them with a big industrial stapler. It looks like a book and you're reading page after page. Whereas, when you're looking at a 75 page spreadsheet on the screen, you are navigating it in two dimensions, i.e. you can scroll up or down and you can navigate left or right. You're really panning the worksheet whereas in the printout it makes it really tricky to pan. This is where I find that using options to **'fit the width of printout'** to either one page wide or one page tall is really good. All the things that I am talking about can be quickly accessed by going to the **Page Layout** ribbon. It is available in Excel 2007, 2010 and 2013. Go to the Page layout ribbon and you can access it there. The width settings can be set from the **'scale to fit area'** on the Page Layout ribbon. By default, the width and height of a spreadsheet are set to automatic which means that it will print as many pages as you want it to be printed on. But, you can set either the width or the height to one page. Don't set both of them to one page because if you have a really big workbook, it gets shrunk to a really small page. Everything will be so tiny that you'll need a microscope to read it. Instead, set it up depending on the orientation. If you are printing a portrait format, set it to one page wide, and if you're printing it on landscape format, set it to one page high. This way it'll be easier to pan the document when it is printed. You can also mess with the scale settings but the zoom percentage required to get the shape is really tricky. So, use either one page wide or one page high so that your print outs look very good. This is the first tip that I use when I want to optimize something for print.

The second one is that sometimes a report has multiple sections when you are preparing it. Let's say that you are making a business balance scorecard or an annual report. The report will have sections on financial performance, operations matrix, marketing performance, customer service performance and so on and so forth. So, it makes a lot of sense to have breaks within these sections so that each of them goes into a separate page. So, you can also insert a page break - select a row from your spreadsheet grid and insert a break from the Page Layout ribbon. From the 'Breaks' button, click on **Insert Page Break** and wherever you are, you'll see a page break inserted and a dark line will be shown on the screen to indicate that a page break has been inserted there. You can also remove the page break but most of the time, when you do this, it is usually the last step and you really want to ensure that the breaks are inserted at the right points so that your report can be broken into proper sections.

Sometimes when you have a multi-page report - let's say that you're reporting some sort of sales or expenditure numbers and you have these 700 products and you want to print it - and the headings are only displayed on the first page while the second page onwards just have raw numbers and you don't know what's what. This is where the option of **'print titles'** available on the Page Layout ribbon is useful. You can tell Excel the rows and columns that you want it to print on every sheet. This way you can print a static header on every page of the report which is very useful when you have a long report.

The other two settings that are very common, but if you are working for a while and you handle a lot of printouts or material which is very common in office environments, then you already know about **page**



sizes and orientation of pages. Again, depending on the printer and the paper that you use, make sure that you have selected the right page size and the right orientation depending on the type of material that you are printing, so that it looks pretty when it is on paper.

That's a little bit of a primer on printing. Apart from these things, I also always try to **optimize my page margins and alignment of spreadsheet content** on the page. If I have a very small report, I would rather print it in the center of the page rather than the top left corner. This way it looks even and people can focus on it. If it is in a corner then it has a lot of white space around it and it can look as if the report is incomplete. So make sure that you also play with the other settings on the Page Layout ribbon so that you get an idea of what is available to you and how you can utilize it for your work. This is a little bit of a primer on the print settings.

Now let's talk a little bit about **unprintables**. Unprintables are the things in the workbook that make **no sense when printed**. A good example is that let's say your workbook has a hyperlink - you're linking to another tab or an intranet website by inserting a button that says 'click here to go to salesforce.com for more details' - that button makes a lot of sense when somebody is viewing the workbook on their computer as they can click on it, and they'll go there. But, on a printout, that button makes no sense as I can't click it on a printout. So, why bother printing it? This is what I call a classic unprintable. You don't want it on the printout. How do you get rid of those things? Would you delete them when you print? Well, that doesn't make much sense and it's not an awesome way to do it. There is another option. You can right click on any charts, buttons, form controls, drawing shapes, pictures or other objects on your workbook and go to the options that show. Click on **'size and properties'** and in the properties area you'll see a checkbox that says **'print object'**. By default, all objects will have 'print object' enabled for them. You will want to **disable the 'print object' option on all the unprintable items** so that they will not be printed when you print the document. This is first type of unprintable.

The second type of unprintable is **errors**. A workbook can show #N/A or #Value or #Name or other errors. Maybe these errors will make sense on the screen when somebody is looking at the worksheet from an auditing or understanding perspective. But, what if you don't want to see the errors on the printout? When I am looking at an error on the screen, I can always go and correct it and figure out what's going on. But, on a printout, there's nothing much you can do as you're just consuming the information. So, it's better to **suppress those errors**. Again, you can go to the **Page Layout** ribbon and click on any one of those buttons like margins, orientation etc. and go to **'custom margins'** and go to the **Sheet tab where you can tell Excel what to do with an error**. This is called **'cell errors as'** and by default, errors will be printed as displayed but you can tell it to print a blank wherever there is an error. It won't show on the printout but will just be displayed as a blank cell. This is a very powerful way to suppress errors on printouts.

Another aspect that I often use when I want to deal with unprintables is as follows - let's say that I have a report on the left side of the spreadsheet and it takes up one page and on the right hand side, I've provided some helpful instructions about how the report is constructed, how to read it, what each chart means, what the legends and labels are etc. - you may feel that information is irrelevant for printouts. For the printouts, just the report content is enough and the extra commentary is not necessary. In such cases, I just need to select a range of cells and set the print area. By doing this, you are telling Excel that when you print a worksheet, by default, everything is printed. Instead of that, if you set a print area say from A1:J40, then it'll only print that material when you print the worksheet. If you print anything



outside that range (if A57 has values for instance), it won't be printed. Likewise, if you have some values in columns U, V, W and X, they won't be printed because they are outside the print area. To set the print area, select the range that you would like to print in your worksheet, go to Page Layout, click on the Print Area button and choose **'set print area'**. This will set a print area and **only that selected range will be printed**. Anything inside that range - all the cells, charts, objects etc. - will be printed. And, anything outside that will not be printed by default. So, Print Areas are a powerful way to control what gets printed and what doesn't. In other words, they are a very powerful way to control the unprintables.

Now let's talk about **proofing**. There are two powerful ways in which I proof my documents or spreadsheets that are ready for printing. The very first one is simply **saving the workbook as a PDF**. To save a workbook as a PDF, just go to File menu > Save as > and choose PDF in the save dialog box. That saves your workbook as PDF, and the PDF looks just the way that it is printed but it is static. So, you read the PDF and you understand how it all looks when it is printed. Now, another advantage of PDF proofing is that you are not wasting any paper and you get to correct mistakes quicker. You see it on the screen and you can immediately fix any mistakes. Some of the downsides of PDF proofing options are that some of the images, chart objects etc., might look a little grainy because of your 'save as PDF' settings or your Excel settings. But, don't worry too much about that. As long as you feel that the PDF is giving an authentic replica of printouts, you're good. That's the first way that I would proof my document.

The second way is that you can also use a **'Page Break View'**. Go to the View ribbon and you'll see a 'Page Break View' option on the top left hand side. Click on it and it'll show you what the document will look like and where the page breaks will be. This is a very powerful way to immediately see what things will look like when printed and where each page will be breaking. Excel will show page 1, page 2 and so on. So, you can see which pages go where and what material goes into each page. Another fun thing that you can do on this view is that Excel shows a thick blue line wherever there is a page break and they are not static. You can resize them. So if you don't like what is currently in page 1 and you'd like it to include a few more rows and columns or exclude certain rows, all you have to do is resize the blue color box to the area that you want and your page gets adjusted. You can also move the page breaks around so that everything is properly adjusted. If you have set a print area, the blue color rectangle will only show material in the print area. You can resize the print area by resizing the blue box.

Moving on, the next topic is about **how do we print what is not on the screen?** This is where you may want to print several things that you don't usually see on the screen. As a classic example, let's say that your worksheet has a lot of cell comments. These are hidden by default unless you hover on a cell and it pops up and shows. But, you want them to be printed as they are the review comments that your boss or CEO has added and now you want to print them out so that you can work on them one at a time without having to move your mouse from one cell to another. A good way would be to go the **Page Layout > Margins > Custom Margins or Orientation > Sheet Tab**, and there where you see 'comments' simply say that you want to **show the comments**. You can show them as displayed on the screen, i.e. all the comment bubbles will show up. Or, you can show them at the end of the sheet. This way they will show up at one place and you can quickly read them. That's a powerful way.

Likewise, sometimes you might want to set up a header and footer on all the page print outs, i.e. maybe your company logo or a link to your company website or page numbers etc. You can go to the **Header/Footer tab from the Page Setup** dialog box and set your custom headers and footers. You can use a lot of different options there. Most of this is similar to MS Word.



Likewise, maybe for certain types of auditing or training purposes, you may want to print the row and column headings because you want to explain how the spreadsheet is constructed to an intern or somebody who is moving into the job. So, it may be better if you have the row and column headings so that they know what is in A7 and D43 etc. You can print them. Go to the **Sheet tab on Page Setup** and **enable the row and column headings checkbox** so that they will be printed on the printout. You can also enable **gridlines** but I have never had a case where I've needed to print gridlines on my workbooks.

These are some of the tips that I use. It doesn't take a lot of time. If a workbook takes one week to construct, setting the proper print settings will take less than ten minutes or a maximum of thirty minutes (if you are not focused and doing it while sipping coffee and chatting). But, most of the time, I find that formatting page print settings takes very little time. And, it's worth the investment because many people continuously print and use the documents. More than printing, nowadays, many people are consuming spreadsheets on tablets or mobile phones and you don't really have the full Excel software on them. You have Excel apps but they are not really 100% compatible as the desktop version of Excel is. So, you can spend that extra time setting the print formatting so that when people want to consume this information on a tablet or phone, you can just save a PDF and send that. The PDF looks as gorgeous as your desktop version of the Excel workbook. Of course, the only downside is that it may not be as interactive and the form controls will also not be there. But, at least, all the functionalities that they see on the Excel screen are still there on the PDF or static version. So, the extra few minutes of investment are always worth it.

I hope you enjoyed these techniques and tricks. If you use anything else for print formatting or any of the hacks, please go to <http://chandoo.org/session25> and leave your comments there. I would love to learn from you about how you format your printouts for better looking output and deploy them in my future workbooks too.

Thank you so much. All the links and ideas that I discussed can be found on <http://chandoo.org/session25> where this podcast and a full transcript will be available. Thank you so much for listening. I hope you had fun learning how to make something look sexy not only on screen but also on a printout. Thank you so much. Bye.