



Transcript for Session 047

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Transcript:

Hi and welcome to <http://chandoo.org> podcast. This is session number 47. <http://chandoo.org> podcast is dedicated to making you awesome in data analysis, charting, dashboards and VBA using Microsoft Excel.

First up, I want to wish you a very Happy Dussehra. I know many of our listeners are not from India and so you don't even know what Dussehra is. So, let me briefly explain what it is. It is a festival that is usually celebrated in the month of October in India. This festival signifies the victory of good over evil. Probably all other festivals are like that too. The best thing about this festival is that you get about ten days of school holidays. Growing up, I would look forward to the Dussehra holidays all the time. After the school year starts, right after summer vacation, this the first big holiday. I studied in a residential boarding school and so I was away from my parents and home all the time, and I would look forward to this holiday because I would get to travel home for 10 days and spend time with my family, relatives and friends back home, and get to eat lots of awesome food and chill out. So, I have a lot of fond memories about this festival and this year this festival is extra special for us because all the relatives that we have from my wife's side are all with us since the past one week and they will be with us for the next few days as well. So, our house is just buzzing with joy. All the kids are running around all the time playing and making up jokes and stories and it is so much fun. Yesterday, we all went to a beach and we played a lot. We swam and had lots of fun playing with sand. Then, we brought home some awesome food so that we could all eat dinner and just relax. So, this is a really happy festival and I want to wish you a Happy Dussehra. Even if you don't celebrate it, you don't need a lot of reasons to get together with friends and family and have a nice meal and enjoy. So, wherever you are, celebrate the Dussehra festival.

The topic of the day is '**Best Excel Tools for Entrepreneurs**'. I chose this topic because I am an entrepreneur myself. Well, I started out as an entrepreneur. Today, I consider myself as more of a businessman because I am running a business and not starting a business but when you are starting a business or when you are a small business owner or when you are in a start-up kind of environment, Excel becomes a very prominent and very relevant tool for your business. This is because small businesses, start-ups or even business that are well-funded when they start don't usually have a lot of money or resources or knowledge base to invest into software. So, most of them would try to do everything with Excel. At least that is how I was when I started my business of <http://chandoo.org> five years back. I would try to do everything possible with Excel. So, this is why I thought it is a good idea to



summarize some of the key features of Excel that will help you as a business owner or a start-up or an entrepreneur to share the area of Excel that you need to be efficient or proficient in so that you could do your work better.

Excel is a vast tool and we all know that you could do a lot of powerful things with it. So, anything that a business atmosphere requires can be done with Excel. But, I wanted to **highlight the most important areas of start-up work that can be easily done with Excel**. So, I was trying to imagine myself 5 years ago and I drew a mind-map of the important things that an entrepreneur would do and try to visualize or understand how Excel can help us in all those areas. As an entrepreneur, you are doing a lot of things but, in my opinion, most of those activities will fall into one of the five buckets. The first bucket is what I call **projects and to-do items**. These are the things that you are doing. Let's say you are a software entrepreneur then building the software is a project for you. In order to build the project you may have a bunch of to-do items like hire the developer, prepare the mock-up, develop the code, find a tester to test it, find a beta audience to give this program to and get their feedback and what not. As an entrepreneur, you are essentially managing a bunch of projects and have a lot of to-do items. That is one bucket. The things you can do fall in that bucket. The second bucket is **finances**. You are running a business and so you naturally need to manage money. Even if you make no revenue, you still need to control your expenditure and make sure that you are not running out of the funds that you have. You need to understand your cash flow and where it is coming and all that. Anything that has got to do with your money situation falls in your finances bucket.

You also have another bucket called **customers and marketing**. This is where you need to know what kind of customers you are getting and if they are falling into any kind of segments. What kind of marketing activities are we doing? Are our marketing activities effective? Are we making two bucks for every one buck that we spend in marketing and so on and so forth. All the things that you do with respect to customer relationships, customer management, customer servicing, marketing, and advertising can be grouped into one bucket and we can call it customers and marketing. Another bucket is your **planning, strategy and vision** kind of bucket. This is where you are trying to set up a plan for the future. You are not really thinking about the next three days; you are going to think about the next three years or three decades and try to make a plan or vision and all those kinds of things. The last one is what I would call **process automation**. As a start-up, you are doing a lot of things and most of the time you are doing these things in a haphazard way. You are running around and are trying to manage everything as you go. At one point or the other you will come to a situation where you need to set up some processes so that there is consistency in what you do and your staff can perform better and you can get better and consistent results. So, processes and automation of processes is another bucket.

To **summarize the five areas** in an entrepreneur's working world are your **to-do's and projects, finances, customers and marketing, planning and strategizing, and process automation**.



I thought about the Excel tools, ideas and concepts that will help us in each of those five buckets. Let me go in to each of those five buckets and share some of the very basic stuff that will help you as an entrepreneur. Even if you are not an entrepreneur today and plan to start a business tomorrow, these will set you in the direction and you can start thinking about those things.

Let's talk about the first one which is to-do's and projects. Excel is, in my opinion, one of the cheapest and best ways to manage projects. We could come up with the most complex project management solution and pay thousands of dollars for it and all that, but, in my opinion, Excel can do most of them in a very simplified manner and can give you a lot of control and a lot of clarity on what things are going on and where the project is heading. Unless you are talking about billions of dollars' worth of projects like sending rockets to the moon or constructing a huge bridge across one of the biggest rivers or making a power plant, for most of the common day-to-day projects like building software or raising a new coffee shop or things like that, using Excel to manage the project is really a very simple and easy choice for us. Excel can do a lot of things when it comes to project management. In the previous episode of our podcast, session 46, we talked about various project management activities that can be done with Excel and I highlighted many Excel features that can help you there. If you haven't heard that episode, just go to <http://chandoo.org/session46> to access that episode and listen to the project management ideas.

Of course, Excel can help you with every stage of the project but, in general, when it comes to project management and to-do items, the most obvious thing that comes to mind as an entrepreneur is that you are really **tracking**. You are not the one doing the project. Even if you are, that's another case. Essentially, you've got a team that is doing the project and all you've got to do as a start-up owner or an entrepreneur is that you want to be on top of the situation. You want to know where things are heading and how things are going, where your attention is required, where you need to chip in and where you can close your eyes and say that everything is good. That's what you care about as an entrepreneur or a boss. To facilitate that, essentially what you are trying to build is a simplified tracker. With respect to to-do's and project management, the crux of it is that it is a simple tracker. And, Excel has the best tool to create trackers. You can use **Excel tables**. Excel tables is essentially a table of some rows and columns. Each row can be one of the to-do items or one of the things that you want to track and you can mention the details of various aspects of it like when it is starting, who it is allocated to, what percentage of the activity is completed, how much budget is given to that and so on and so forth. Every detail can be maintained there and all you have to do is simply use Excel tables to build the tracker and later on filter the table to sort the table or use the table to plot a chart or whatever so that you can understand how things are going and where you need to focus your time and attention. Tables are the first feature of Excel that will help you as an entrepreneur. If you have not used tables before, use them. You might be thinking why you should bother using tables and not simply set up a range and start using that. For example, list the activity in cell A1, list the second activity in cell A2 and so on and so forth. But, that can be very clumsy and any formulas and any further analysis that you would do on top of it will have to be manual and a lot of extra work. Tables take care of a lot of these things and a table will be a self-contained structure. Once you have a table for your tracker or to-do list or project list, you can simply



link that to another area of the workbook like a report or finance section and talk to it as if it is one set of data rather than individual cells. So, tables are a powerful way to set up your projects and to-do lists.

Explaining how tables work and the advantages that they will provide you in a podcast is somewhat tricky. Probably I'll do another session down the line exclusively on tables. But, for now, I request you to visit <http://chandoo.org/session47> which is the link for this podcast where I will provide you a resource on Excel tables. It is an article that I wrote a while ago that clearly explains to you what an Excel table is, how to set it up, the advantages of it and some use cases and scenarios for tables. So, go there - the link is <http://chandoo.org/session47>. That's your tables which is the first Excel tool for entrepreneurs.

The next one I have is your bucket of **finances**. For all the financial activities that you are doing, having some understanding of Excel finance formulas is really important. In fact, I would go ahead and say that if you are considering entrepreneurship as a career path or if you are planning to become a CEO or business owner down the line, learning about finances is a must have skill. You need to understand what a profit and loss statement is, what a cash flow is, where your money comes from, where it goes, and what a budget is etc. Not only do you need to understand the basic level stuff but also what a discounted cash flow means, how time value of money works, what inflation is, what interest rate is, what risk free interest rate is, what the internal rate of return is etc. All these concepts are really mandatory. You might wonder why you would bother with all this and that you'd just hire a financial specialist who will be part of the team and take care of all this. But, don't be like that. As a business owner, you need to have very good clarity on how money works. Essentially, business is a vehicle through which money is flowing and because of the process of money flowing through you, you will become rich or meet your goals. So, if you don't understand how the money part of the business works, you are not going to have a very good control over your business. These are not just my words. I am reading a book by Scott Adams, the guy who draws Dilbert cartoons. I don't remember the exact name of the book but I think it is something like 'All I learnt in my life through failures'. So, essentially, what Scott Adams says is that he failed many times in his life in various endeavours and all those failures made him what he is today. It is essentially a very good way to look at failures because every failure is an immensely rich learning experience. In the book he talks about the essential skills that you need to have in order to lead a successful life and one of the skills is business finance. So, you need to understand how the world of finance and money works and have reasonable clarity on cash flow statements, discounted cash flows and risk free rate of return and things like that. So, learning about those things is really very important if you want to run business.

When it comes to running a business and obviously using Excel to manage day-to-day things, learning spreadsheet formulas for financial analysis is really important. In case you want to learn more about basic financial analysis and modeling concepts using Excel, I would recommend you to listen to session 42 in which we talked about introduction to financial analysis and modeling using Excel. I would say that podcast is a must have in your listening list. Go to <http://chandoo.org/session42> to access that episode. It has basic financial formulas like NPV, IRR and some simple formulas and concepts like how to lay out a



spreadsheet so that you can capture your cash flows and do some analysis, or structure your income statements and things like that. Keep in mind that while Excel can do a lot of things for practical reasons and also for the reasons of a risk free environment, I would not recommend using Excel for any of the activities like book keeping and accounting. You can use Excel to do your financial reporting, financial analysis, modeling and understanding how your money is flowing and all that but don't use it for keeping your books. Excel is a very flexible and very easy software. Anything that you enter can be modified by someone else. There is no security or hierarchy or anything like that in Excel. So, if you are keeping your books in an Excel workbook it can quickly turn into a nightmare and managing it can be very hard. You can use Excel to track various things like expenditure and all that but, later on, when it comes to making your books, you should probably consider some sort of software or even a manual paper and books system to keep your ledgers and all that. Don't use Excel; at least this is my personal experience. Many experts tend to agree on that as well. The second bucket is finances and in order to master finances, use Excel financial formulas and modeling concepts. For more on that information, listen to session 42 of our podcast.

The third bucket is your **customers and marketing efforts**. Again, all of those activities that go into marketing analysis, marketing management and advertising and customer analysis can be done with Excel. My favorite feature, when it comes to analyzing marketing efforts and customer data, is pivot tables. This is because, as an entrepreneur, I get a lot of customer data. For example, any time that you visit <http://chandoo.org>, your visits are logged by our site tracking program - Google Analytics - and they keep track of all the data like where people are coming to our site from, whether you are from US or UK or Australia or India - all of that information is captured. The time you spend on the site, the pages you visit, the time you spend on those pages, where you go next, do you leave the site and go to some other page, the path you are following - all of that information is recorded. If I want to analyze that and understand what is working and what is not, for example if I should record more podcasts in the direction of financial analysis and modeling or if I should record more podcasts in the direction of VBA, how do I make that decision? Obviously, one way to make that decision would be to analyze the data and see which of our podcast episodes are more popular - which episodes are being downloaded more, which episodes are listened to more often and where I get more comments - based on that, I get a sense that these are the ones that resonate well with my audience and so maybe I should add that episode. Or, these are the ones that my audience are very critical about and so maybe I should think of a new one to present that information. That is one type of analysis that can be done with Excel pivot tables. All you have to do is take the data and set it up as a pivot table and apply sorting and you would get that kind of information very quickly.

Another kind of analysis that I do is our sales transaction analysis. I sell a lot of products like courses, eBooks, templates and all that and every month, I would usually download a log of all the purchases. And, the analysis that I do very quickly is understand purchases by the group of products, i.e. whether people are buying courses or templates or eBooks and where we are getting our volume and how much money we are making from each bucket. Likewise, I also like to ask questions like are we getting customers by multiple products or single customers. For example, if the same person like Mr. X buys our



course now and buys our eBook a month later then this us good information for me because this tells me that we have loyal customers. If I have loyal customers, it is good for me in the long run because any new product that I release, Mr. X will buy that and that kind of implies that I have more certainty in the future. This is all very good to know and will help me plan my business better. Again, in this case, I use pivot tables to understand how many people are buying multiple units and what kind of people are recurring after some time, what their profile is like and all that. And, pivot tables can be used for that.

Likewise, if you have a vast number of customers in the database, like many of you sign up for our newsletter and whenever you sign up, I get your details then I know your name, your email address, your country, your IP address etc. And, I can use that information so that I can group you into multiple groups. For example, if a bunch of people have signed up from the dashboards page, I can say that these are the people who are probably interested in knowing more about dashboard topics and so I can send them information about dashboards. Whereas, if some other set of people are signing up for the newsletter from VBA related pages, I can send them information about VBA. Again, this kind of analysis can be done very easily with pivot tables. The same can be applied for any business. If you are running a coffee shop and you are offering some loyalty cards to customers, you can track the product the customer has bought before signing up for the loyalty card. For example if the customer had purchased cupcakes or candy before getting the loyalty card and another set of customers buy coffee and then get loyalty cards, you can see these two segments of customers. One are coffee drinkers and another are snack eaters. You can design your campaigns and marketing efforts accordingly. But, that kind of analysis can be done with pivot tables as a start. I am not saying that all of that analysis is possible with pivot tables but pivot tables are the starting point for doing this type of analysis. Again, if you are new to pivot tables or if you have never used pivot tables then I would recommend session 18 of <http://chandoo.org> podcast. This session is all about pivot tables. It is called 'Don't be a pivot table virgin'. In that session I talk about various aspects of pivot tables, how to use them, how to set them up, some of the standard processes to follow and what you can expect when you have a pivot table and all that. So, go to <http://chandoo.org/session18> for that information. You don't have to remember all there URLs; you can simply go to <http://chandoo.org/session47> which is the link for this episode where I will link to the resources about pivot tables as well. So, this is your third bucket which is customers and marketing analysis and you can do that using pivot tables.

The fourth one is **planning**. There are many things that come to mind when you talk about planning and setting up a vision and thinking about the future and strategy and all that. Excel is a very good tool in all of those scenarios. But, one thing that comes to my mind when we talk about planning and the future is forecasting. Excel is a perfect tool for doing forecasting and analysis of data so that you can kind of get a sense of where you are heading and how to plan for the future. To do all of that, you can use Excel **forecasting analysis tools**. The good thing is that until Excel 2013, you had to do a lot of forecasting analysis either manually or by using formulas. There are many formulas to do the forecasting but in Excel 2016, Microsoft went one more step ahead and even added support for built-in forecasting. So, you can select your data and say that you want to forecast the data and Excel will try to understand the data, i.e. is it linear, exponential, cyclical etc. and accordingly Excel will come back and do the



forecasting for you with confidence intervals and what not. So, depending on the version of Excel you are running, you can do this forecasting in many different ways. As a good start, I would recommend listening to session 36 of <http://chandoo.org> podcast where I talk about how to do forecasting and trend analysis using Excel. This is your fourth bucket - planning and analysis - and one powerful way to do that is to do the forecasting analysis using various Excel features.

The last one is **process automation**. Again, Excel is a natural in this area too. We can automate various processes using features like VBA or formulas. For example, let's say that you are running a salon and you have multiple chairs in the salon where customers can come and sit and get a haircut or make-up or whatever you offer like a massage or whatever. You want to design a reservation system for the salon so that when the customer calls you don't write it on a sticky-note or something. Instead, the data goes into a spreadsheet so that you know what time the customer is coming and accordingly you can plan your staff and all that. Of course you could come up with a complex software to do that or instead all you have to do is make a simple spreadsheet where you guide the front end telephone operator to simply enter the data into the spreadsheet. All they have to do is type in the name of the customer and what time they are coming in for what service. Then, every day in the morning, all you have to do is take the data and run it through a pivot table or some other set-up or even formulas so that you can immediately know how many customers are coming at what times of the day, how overloaded you are and accordingly guide your staff. You may have to have 5 people during the morning session and 3 people in the afternoon session. All of this can be done very easily if you set up a process - capture the call data, enter it into a spreadsheet and then set up another process to consume the data, understand the reservations that you have for the next day and accordingly decide how to plan your staff. This is the process. What would happen when you start a salon? Initially as a start-up entrepreneur you probably don't have that process unless you think a lot about the business when you are starting it. You would be so super excited about the prospect of owning your own salon and helping customers looking gorgeous that you would forget about the process. So, we jump with both our feet into the deep end and start servicing customers. There will come a point down the line maybe in 1 week or 3 months or 6 months when you have way too many reservations and way too few staff or the other way around. You might have 7 people standing there waiting for clients and nobody might show up. This is because you haven't defined a process and so you don't really know how things are working and you couldn't optimize that scenario. This is why defining the process and automating it as much as possible is highly important for businesses. As an entrepreneur myself, I try to look at everything that I am doing and as much as possible, I try to automate it. Sometimes I use Excel and sometimes I use tools like Gmail and what not. But, whatever may be the situation, the first thing that I try to do as an entrepreneur is think about how I can minimize my work because I know that any time that I spend trying to do a manual process is time that I am taking away from my family, customers and personal activities. So, I don't want to spend 12 hours a day just looking at computers and sticky notes trying to do things. This is why, as an entrepreneur, it becomes really important that you define a process and automate it. And, Excel is the perfect way to get started when you want to define processes and automate them.



To define the processes you can use simple spreadsheets designed to capture inputs or collect data. To automate the processes, you can use formulas or you can use VBA or sometimes you can use both. For example, in the case of sending a thank-you note to all your customers, you could simply write a VBA script that will do this for you, i.e. generate thank-you notes and send it to Outlook so that Outlook can email it. All of that can be automated so that you don't make any mistakes and your customers still get personalized thank-you notes. All of this is very much possible with Excel. Of course you would require a good level of Excel skills to do the VBA programming but anybody with basic understanding of Excel can set up formulas and still automate a lot of stuff. That's your fifth bucket.

To summarize, to manage to-do's and project items, we can use Excel tables. To manage finances, you can use simple Excel financial formulas and model concepts. To manage customer and marketing data, you can use pivot tables. To do your planning better, you can use forecasting features that are available in Excel. And, finally, to set up your processes and automation rules, you can use VBA and formulas. These are the five areas that will help you as an entrepreneur. If you know these five Excel features alone, you are going to derive a lot of mileage out of it and save a ton of time and all of that time will directly go back into your business or family which will make you happier. So, if you are one of those entrepreneurs who are still struggling with your business in the early stages, I highly recommend that you use Excel as much as possible and get most of your things done through it. Use Excel as your lowest paid but highest output employee. You don't pay Excel anything other than the time you spend setting it up but it can do a lot of things for you and automate everything for you. So, all the best with that.

For all the information, links and resources mentioned in this podcast, visit <http://chandoo.org/session47> where I am going to list all the links about pivot tables, VBA, forecasting and what-not and also link to the Scott Adams book as I think it is a good one to have especially if you are an entrepreneur or if you are working as an Analyst or Manager but want to know how to make your life and career more successful. I think it is a good book and it is a short one so definitely get it and read it on your kindle or something so that you get some new ideas.

Thank you so much for listening to this podcast. I really appreciate your tuning into it. I have to now go back and celebrate Dussehra with my kids. Talk to you again soon. Bye.