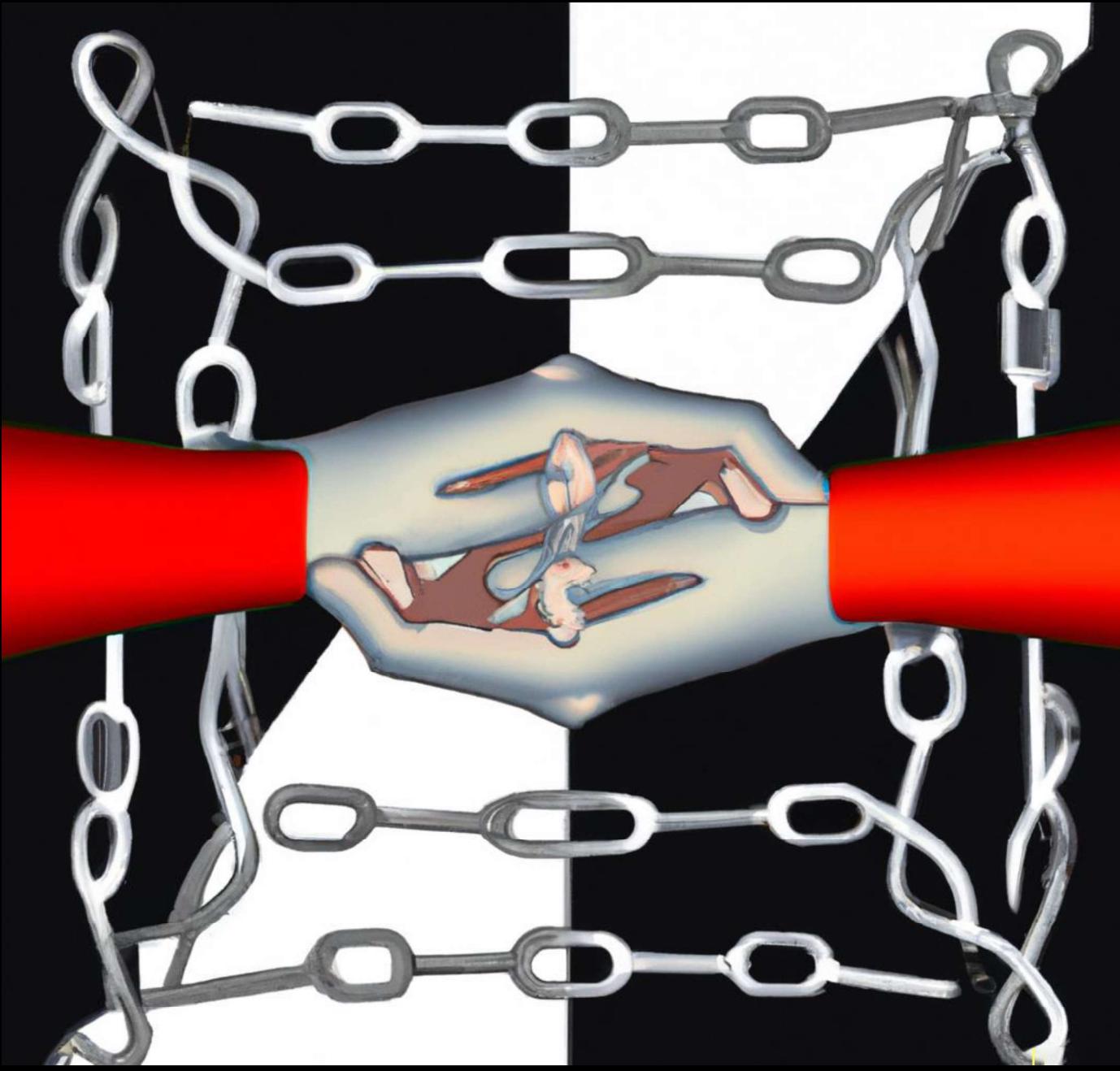


Breaking The Chains

By

Maxim G Maltsev, CPA



“If I Had More Time, I Would Have Written a Shorter Letter.”

--*Blaise Pascal*

“If I only had an hour to chop down a tree, I would spend the first 45 minutes sharpening my axe.”

--*Abraham Lincoln*

“brevity is the soul of wit”

--*William Shakespeare*

“You can see the computer age everywhere but in the productivity statistics.”

--*Robert Solow*

“What a pity every author does not have to take his share in the printing of his works! What progress printing would have already made!”

--*Pyotr Kropotkin*

“I continued to think about this after we sold PayPal in 2002: if humans and computers together could achieve dramatically better results than either could attain alone, what other valuable businesses could be built on this core principle?”

--*Peter Thiel*

“Where nothing better is to be had, cognition values even the hollow semblance of it, and derives from it, some measure of satisfaction.”

--*Hegel*

PART I

The Practical Application

Section 1: Introduction & Philosophy of Automation

Modern society is haunted by the specter of cultural and economic stagnation. Moving forward, if we are to meaningfully grow, or even maintain, our current standard of living, the productive forces of the economy will need to be radically enhanced through a deliberate program of technical modernization and automation. Yet, per-capita productivity growth—at least relative to that which prevailed during the Industrial Revolution—has sputtered across the developed world in recent years. The Materiality Efficiency Framework seeks to be the antidote to these negative trends of economic stagnation in both spirit and practice. In the broadest possible sense, The Materiality Efficiency Framework (MEF) is the maximal application of Neo-Taylorist workflow process improvements, carried-out in the full light of human reason, so as to relentlessly increase the labor efficiency of any given system of production. And however difficult our present circumstances might otherwise be, however dim that brilliant light of human reason might at times appear, we must have faith that a better future is possible—for all of us.

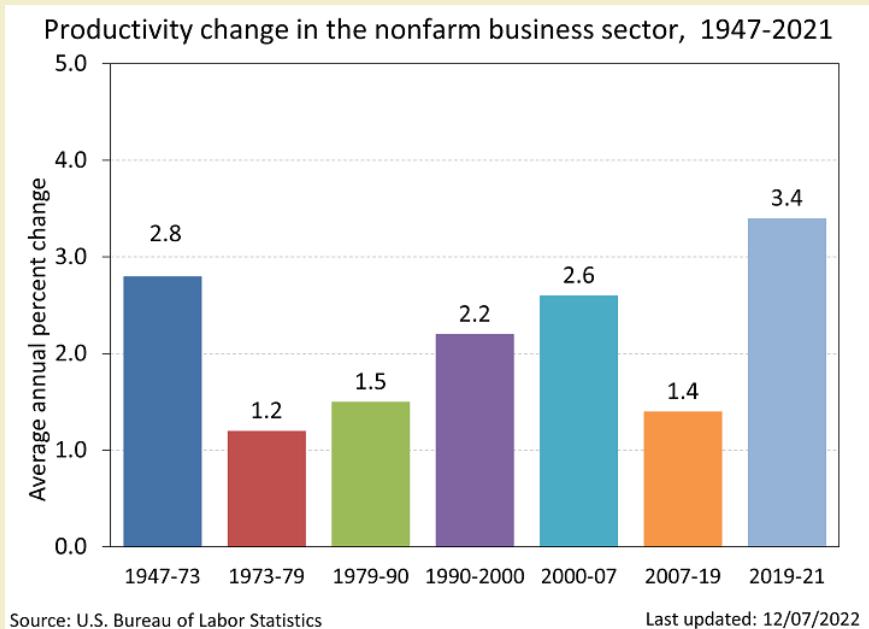


Figure 1 The 2010s were a “lost decade” in terms of labor productivity growth. It was the decade we gave up on building the future, and chose to create Uber, Instagram, and WeWork instead. Hopefully, we are now turning the corner on this miserable decade of mediocre stagnation.

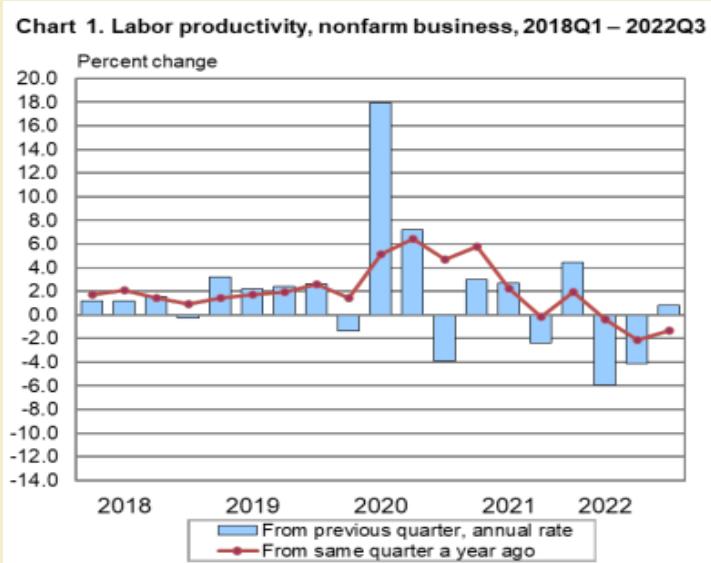


Figure 2 Although, it should also be noted that at least some of the seemingly impressive 2019-2021 productivity increase was the result of the economy having (temporarily) produced the same level of output with fewer workers during the height of the 2020 COVID layoffs. A great deal of work clearly remains to be done in this regard.

I warn you that there are no vague corporate buzzwords in this book. No trendy talk of “open offices”, “collaboration”, or “work-life balance”. No deranged, quasi-mysticism typical of so much of the “self-improvement” industry. Large sections of this practical guide to Materiality are extremely boring and mundane in nature. Alongside my more *edgy* philosophical takes on automation, and the role of technology in society, there is much talk of Excel spreadsheets and PDF files. A true mass increase in labor-efficiency, and therefore economic value, can only ever be a mundane affair: one can build a better mouse-trap, but one cannot make the *process* of building a better mouse-trap all that exciting or interesting to the average reader. So, hopefully, my friend, you aren’t average.

With the above in mind, give yourself at least two weeks to learn this system—I promise the investment you make here will be well-worth the cost in the end. If you apply the efficiency principles and methodologies consistently, this new style of working will put you well ahead of your peers, and save you hundreds, potentially thousands, of hours of your precious time. You can always earn more money, but your time is the one thing you can never truly get back. Challenge yourself to read and understand the boring parts.

Join me, and together, we will see what limits may yet be broken and what new heights may yet be reached!

Before we begin in earnest, I would like to establish a general philosophical baseline for how I approach the process of technological modernization, of which “automation” (as that term is commonly understood) is only one major part. In my view, truly effective system modernization does not seek to entirely substitute the end-users of a given production process or workflow, but rather, to compliment them—making them several times as efficient in their daily tasks as they would otherwise be. Humans and computers are good at fundamentally different things, and are therefore most productive when they function in a harmoniously symbiotic relationship—one rooted in the broader principle of comparative advantage. I believe many software developers and engineers today forget this crucial insight when they attempt to replace humans entirely with machines by trying (and often failing) to implement wholesale automation solutions. Even a fundamentally revolutionary technology, such as AI, can only ever be so dynamic in nature without genuine self-awareness, and so is probably best suited for a co-pilot role in many, if not most, use-cases. And don’t get me wrong: AI is great. What matters is increasing actual-aggregate economic productivity for the entire world system.

Regardless, I believe it remains the case, even today, that full automation requires full data standardization to be worth the cost in a great many industries, and data in the real-world (especially for the most complex jobs and least technically sophisticated clients) is hardly ever fully structured or standardized to such an extent. Most wholesale automation solutions assume functionality under conditions far more ideal than those that actually prevail in practice. Therefore, the best automation or “AI” remains human beings themselves: we just need to give them the tools they need to become several times as efficient as they currently are at performing their jobs. I believe taking this much more basically essential approach to automation creates a far higher ROI, especially in the short-to-medium term.

At its core, the Materiality Efficiency Framework (MEF) is built around three key, interlocking components. First is this very book you’re reading right now, *Breaking The Chains*, which outlines my general theory of how to perform work as efficiently as possible—with a particular focus on white-collar office environments. Tied into this general theory of efficiency are two additional components: the first of which is the Companion Excel Macro Workbook. Companion is a custom macro workbook containing a number of highly-relevant VBA macros for Microsoft Excel, which should vastly increase your proficiency and productivity with this ubiquitous office spreadsheet software.

The final component is my own pride & joy, the Materiality Desktop [App](#). This app reconfigures the keyboard shortcuts typically found on your Windows PC to be easily compatible with also using the mouse during your work. Materiality creates mouse-hotkey

compatibility by re-mapping the primary keyboard shortcuts utilized by the end-user to be called from either the left side of the keyboard, the mouse, or both. Shifting important hotkeys to the left-side of the keyboard, and the mouse, solves one of the key incongruities of modern desktop computing, which is the utterly irrational distribution of hotkeys on the standard QWERTY keyboard as currently constituted. Or, to put it another way: most people actually *like* to use the mouse, while also using their PC graphical user interface at the same time, so why shouldn't the physical layout of keyboard shortcuts mirror this perfectly legitimate user preference? The Materiality desktop app resolves this core contradiction in modern computing.

As for specific examples of discrete applications, the use of the Microsoft Office suite (Word, Excel etc...) is assumed. For PDF files, Adobe Acrobat Pro will be used as the default PDF reader of choice for the MEF. Materiality runs seamlessly alongside (and on top of) these common office applications in order to achieve the ideal conditions for white-collar workflow efficiency. A fully comprehensive list of Materiality/MEF hotkeys can be found in the "MEF_Shortcuts" Excel sheet. A summary of each hotkey can also be viewed by going into the Preferences menu of the app, and hovering over each distinct name label—the hotkeys can be turned on & off from this central hub as well.

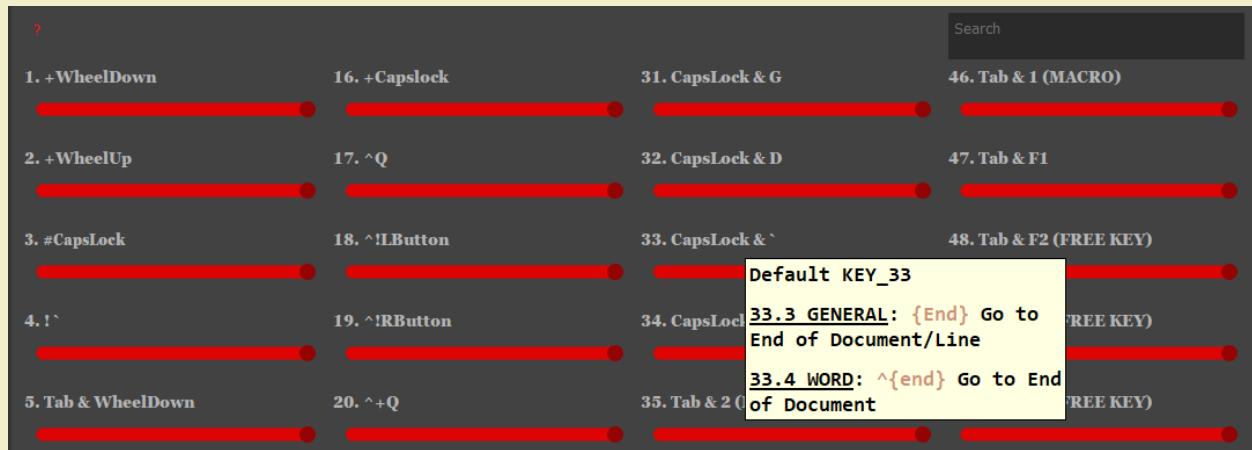


Figure 3 In Materiality, detailed descriptions of each hotkey are available by mousing-over its label in Preferences.

However, I will also emphasize strongly to the reader that the heart of the MEF is not the specific apps demonstrated in this guide, but rather, the general principles of efficiency serving as the underlying-material base. The principles of efficiency themselves are ultimately application-agnostic in nature.

Since Materiality runs on top of, and alongside, every other office app mentioned in this guide, it is important that we first go over the syntax of how hotkeys are actually defined in the app itself—since I will be using this notation from here on out. Generally speaking, all of the keyboard shortcuts used by Materiality are self-explanatory, except for the following syntax, which is based on AutoHotkey and refers to the various modifier keys.*

KEY	M NOTATION
CTRL	^
SHIFT	+
ALT	!
WIN KEY	#
TAB	Tab
CAPS LOCK	CapsLock
Right Mouse Button	RButton
Left Mouse Button	LButton
Middle Mouse Button	MButton

Furthermore, hotkeys for Materiality will operate differently depending on which application is currently active, and it is possible to change this default behavior by altering the hotkey's scope. To re-map the scope, go into Materiality's Set Scope settings, and click on the red "AH" button. This will open up the AH Window Spy (a utility program that comes pre-packaged with the app). Copy over the "ahk_class" of the app that you wish to place on a particular scope, and save with CTRL+S. The hotkeys for that scope now apply to the new app—although you will probably want to create custom hotkeys for the new app/scope to suite your needs. To do this, go into the scope's settings from the main menu, and re-map the keyboard shortcuts using the AH notation outlined above. You can also import/export various keyboard layouts, using Materiality's Edit menu: doing so can be useful in maintaining multiple different keyboard bindings for multiple different app workflows.

*In this book, the plus sign (+) generally refers to the Shift key within the Materiality/AutoHotkey notation. However, the shortcuts CTRL+F, CTRL+H, CTRL+Y, CTRL+Z, CTRL+C, and CTRL+V still use the plus sign as an append operator, since they are broadly recognized as such. Other than these basic (and well-known) keyboard shortcuts, the plus sign refers to the Shift key.

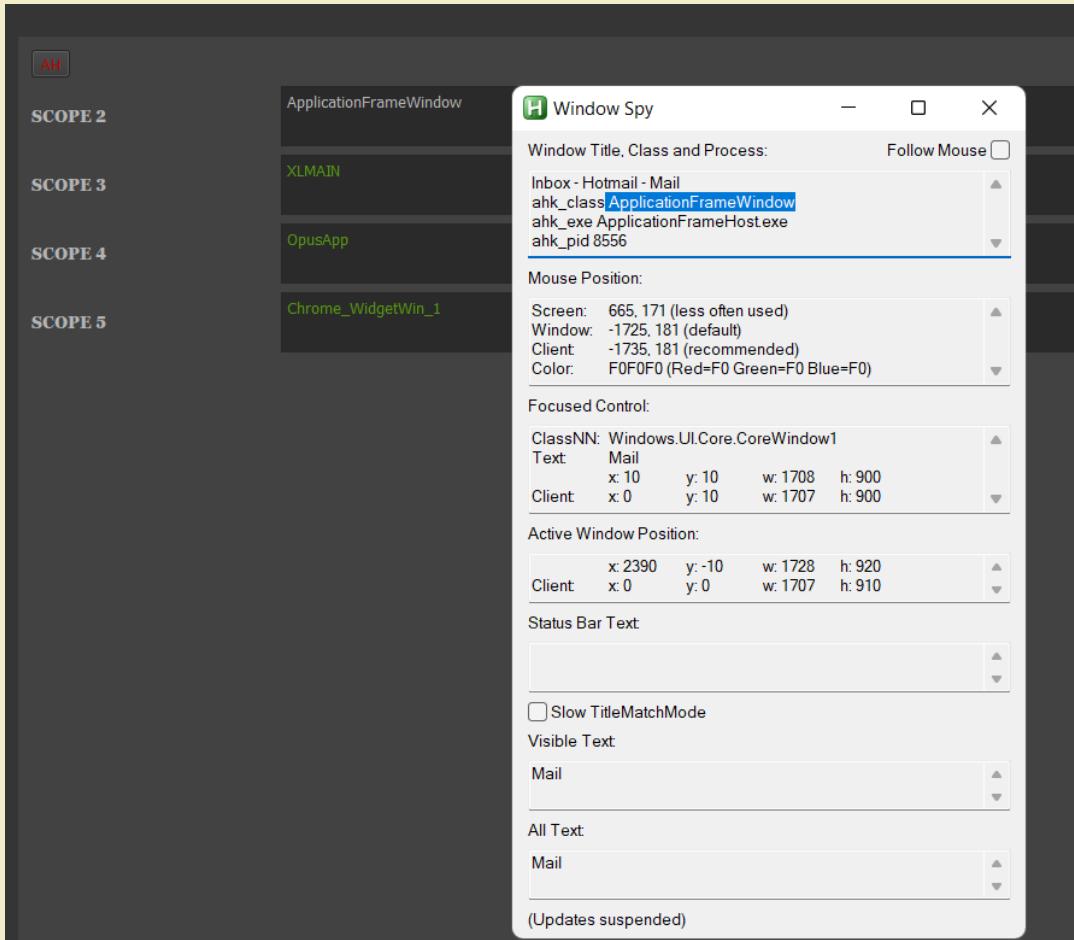


Figure 4 Re-mapping the keyboard shortcuts of Scope 2 to the Microsoft Outlook app. To change the scope, activate Window Spy, and click into the desktop app that you wish the scope to apply to: copy over the ahk_class as shown above. You can save the new scope settings with CTRL+S.

However, it should also be noted that the vast majority of hotkeys (classified under the “General” section in Materiality) have the same intended functionality across all desktop apps. In the menu of each scope—as in the preferences menu—hovering over the name of each hotkey with your mouse will display a tooltip that gives you an overview of that hotkey’s primary purpose. Note that not all hotkeys that are part of the MEF are Materiality hotkeys: some are simply native keyboard shortcuts, provided in their original form. Native keyboard shortcuts and Materiality hotkeys can be distinguished by the presence of an “M__” as a prefix before any Materiality hotkey is referenced.

In addition to the regular hotkeys, Materiality reserves the CapsLock & F-series keys for making file calls: this feature enables the end-user to activate files of their choosing from a keyboard shortcut. To call a file, copy the path to the file's .exe extension into the corresponding CapsLock & F-Series dialog box, and hit CTRL+S to save. You are now ready to call the file from that key. Also, if you would like to auto-start Materiality on log-in to your PC, all types of apps (not just Materiality) can be launched on startup by placing shortcuts to the .exe files of those apps in the startup folder. Therefore, to have Materiality begin on startup, place a shortcut to Materiality's main.exe file in your system's startup folder. Also, to have Materiality launch only in the taskbar (i.e. without displaying the main app menu when launched), go into Preferences, and de-select "Show On Startup".

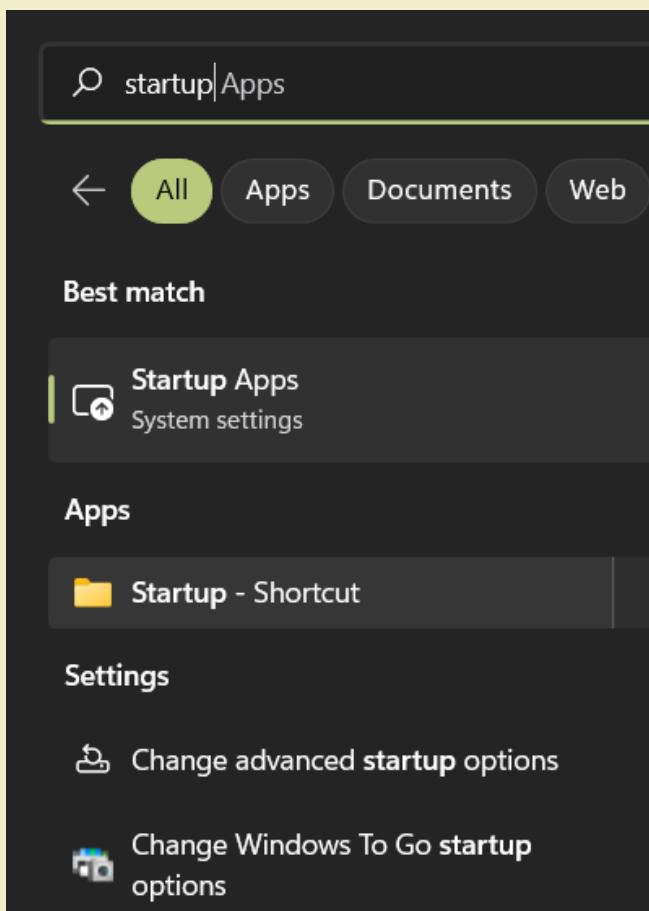


Figure 5 The easiest way to get to the Startup folder from your system's main desktop.

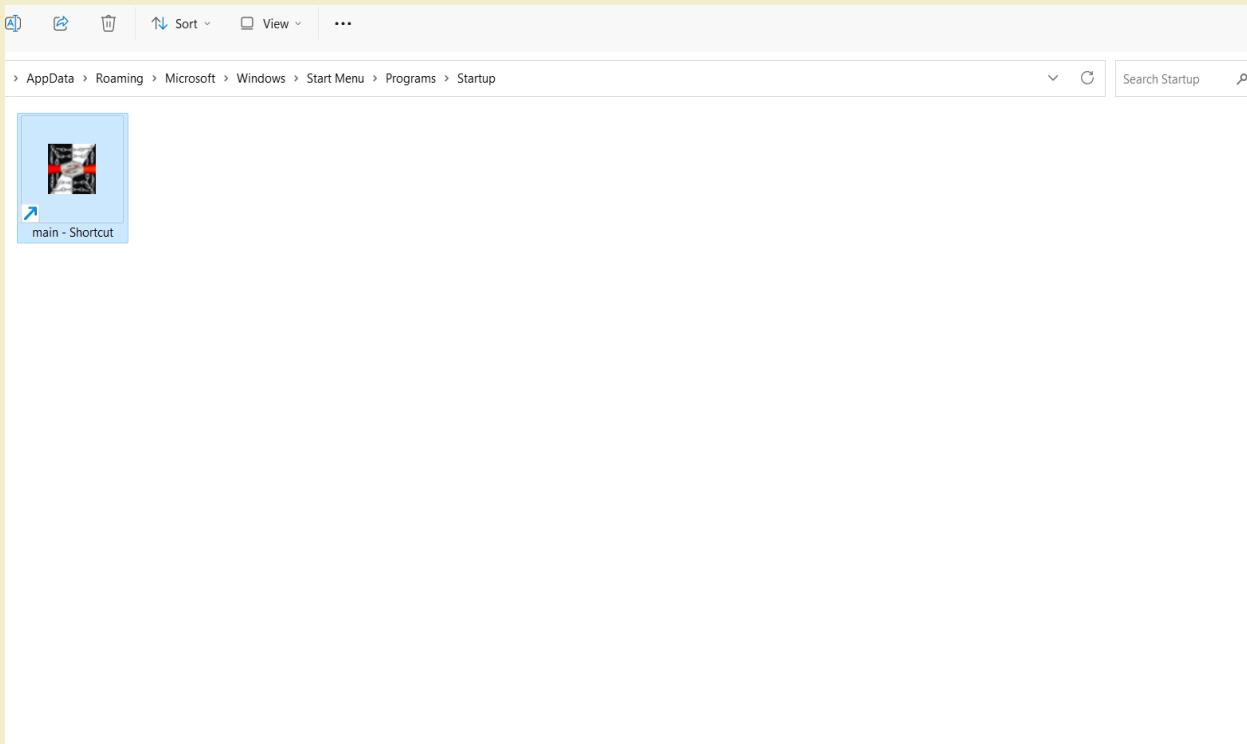


Figure 6 The startup folder with the main app shortcut set to auto-launch on log-in.

G-15.1 Now, I will take the opportunity to zoom-out a bit as to my broader goal in all this. In the greatest possible sense, the primary purpose of Materiality and the MEF is to increase the aggregate-economic productivity of the entire white-collar workforce, so as to effect a great historical and social transformation. An ambitious goal perhaps, but I believe the potential is there to accomplish this world-changing vision of office technological Acceleration.

G-16.1 In a 2015 Telecom [conference](#) with Morgan Stanley, Microsoft stated that they had around a billion users for their various office products. While this figure is likely somewhat exaggerated on Microsoft's part (depending on how they are defining active users/licenses etc...), the overall market-research consensus does seem to place the total worldwide headcount of knowledge workers at around the one billion mark or so. If we can make even a small fraction of these office workers 5 to 10 times more efficient than they currently are, can you imagine the massive economic windfall that would occur for the entire global economy, for our entire society? That is what I am after, at any rate.

G-17.1 That having been said, there is no denying that—as currently constituted in this guide—the MEF leaves-out at least half of the global economy (the blue & pink collar half). Therefore, a secondary purpose of the MEF is to establish a universal, Neo-Taylorist theory of labor-efficiency that will eventually be implemented within all other major economic sectors of the world system. My goal is also to inspire others to take on this

much more difficult, but vastly more rewarding, challenge of physical innovation in the real-world. The goal is not, and can never be, to create complex software and hardware solutions merely for their own sake. All economic value is labor efficiency as defined by use, and Rube Goldberg machines help no one.*

Moving on, the hardware requirements for adopting the MEF are minimal: a standard desktop PC or laptop computer running Microsoft Windows is the primary prerequisite of using this system. In the future, I will definitely strive to port Materiality to Mac OS as well. I would also recommend the use of a 10-key [numpad](#), especially if you spend a lot of time working with numbers. I have also found that a [T-84](#) calculator can be an invaluable asset for doing quick & simple calculations that don't necessarily need to be done in Excel.

You should also consider your physical environment (desk, chair, noise-level etc...) just as much as you consider your digital one. For example, I personally use a [BoYata](#) laptop stand to always keep my monitor at eye-level. From personal experience, I would also endorse this [Executive Office Chair](#), which pairs quite nicely when combined with two of these [back-supports](#) as well (I should note that I am not affiliated with any of these sellers, nor am I paid to shill the above products). Furthermore, I would strongly recommend using some sort of keyboard cover, as this is generally the cheapest possible insurance you can buy for your computer. The additional items of kit I have outlined above are purely ancillary in nature: although, in my view, they are well-worth making the one-time investment for. Sometimes, optimizing the simplest/most obvious elements of your physical environment can help deliver the greatest efficiency gains. Regardless of what specific office setup you decide to use, the general principle—the goal—is that your posture should be straight and everything should be at eye-level.

And for reference, my own office workspace looks like this:

*A common misconception is that effective automation consists primarily of automating the mass, wholesale entry of structured data—which most office solutions seem to always assume is far more structured than it ever actually is in practice. However, the vast majority of office labor-power is not directed toward working with clear, structured data sets, but rather convoluted, unstructured data sets. To effectively automate the entry, processing, and analysis of such unstructured data (the area where the greatest labor-efficiency and therefore the greatest economic value is to be gained) it is necessary to invest in the skill & capability of the end-user. Think small. Think logistical. Think about what work processes actually take up the most amount of time. Pay attention to the most minute physical, individual movements. Discover best practices, and spread them throughout the organization.



Figure 7 My own office workspace. Not the most advanced setup, but it gets the job done.

G-21.1
With that bit of housekeeping out of the way, we can, at long last, begin our journey into the wonderful world of datatypes and their practical applications.

Section 2: A General Theory of Datatypes and Their Application

Think of a typical white-collar occupation. Perhaps you are thinking of an architect, engineer, or software developer. The truth is that it doesn't matter, since all data analyzed by these various occupations and professions can be classified into only a few discrete datatypes. In practice, all data represents either a string of text or a quantitative numerical value. We will explore these datatypes and their subtypes below.

String data refers to data displayed in the form of text. (like the words and sentences that make up this paragraph, for example). Quantitative data obviously refers to numbers, but in all actuality, encompasses all non-string data displayed on your computer screen. Images? Defined by numerical RGB values as far as the pixels in your monitor are concerned. Videos? Similar concept. Admittedly, the above duopoly framing is probably a bit of an oversimplification (as digital text is also essentially defined numerically as well), but it does reflect a fundamental truth of how data is processed by people and computer applications in practice, so it will do for our purposes. The MEF takes advantage of this fundamental homogeneity of datatypes across white-collar occupations and professions in order to outline a common efficiency framework that can apply to a myriad of digital workflows. If one knows how to most productively work with all types of primitive data, one need have no fear of more complex systems, which can only ever be the sum of their collective parts.

In seeking to understand string data, we can sub-divide this datatype into two essential subtypes—static string data and dynamic string data—which relate primarily to how likely the data are to change over time. Static string data can be defined as text data that is not likely to change over a relevant time-scale, as defined by the end-users of that data. For example, a law office might maintain copies of court documents from a case that has already been decided. In this example, the substance of the court documents (subpoenas, court briefings, discovery etc...) is highly unlikely to change, as the case has already been closed, and (barring some extreme, unforeseen circumstance) will not be re-opened again in the future. This is therefore static string data.

On the other end of the sensitivity-to-change-spectrum is dynamic string data, which (as the name implies), is highly likely to need to change over a relatively-short period of time. Continuing with our law office analogy above, examples of dynamic string data would include a draft of a court brief that is yet to be filed with the court, or a correspondence/transmittal letter that has yet to be sent to the client. Since the legal case is ongoing, and these documents have not yet been finalized, the drafts of these workpapers are highly likely to need to be edited over a relevant timeframe. This is therefore considered dynamic string data, per the MEF.

G-26.1 Between these two potential extremes of string data lies a broad middle ground. Some text documents might need to be changed on an hourly, or even minute-by-minute-basis, while other bits of string data might only need to be updated once every few months or so. In the end, it all comes down to the particular needs of a given workflow, as one's understanding of the most efficient course of action must always be relative to the general context of one's situation. It should also be noted that the same type of data may morph over time from primarily dynamic string data to primarily static string data. Typically, this occurs when the final draft of a work-product has been prepared—at which point the pace of additional revisions is vastly reduced—and so the data passes from being primarily dynamic to being primarily static in nature. In this sense, it is important to keep in mind the type of string data that is being worked on or analyzed at any given moment in time.

G-27.1 Now that we have covered the string datatype and its sub-divisions, we must turn our attention to understanding the quantitative datatype. Similar to the string datatype, the quantitative datatype can also be sub-divided into two broad categories. However, while the theoretical axis dividing the string datatype relates primarily to its sensitivity-to-change over time, the quantitative datatype is split into two primary sub-categories based on its overall size: Small Numerical Data, and Big Numerical Data.

G-28.1 Small Numerical Data refers to numerical data which it would generally be practical to store inside an Excel spreadsheet (Excel is limited to around 1 million rows and 16,000 columns of data, which sounds like a lot until you consider the *billions* of users a major social media site such as Facebook has). Big Numerical Data, by definition, vastly exceeds the capacity of an Excel spreadsheet, and must therefore be stored and interacted with using a relational database solution, such as MySQL, or alternatively, a NoSQL database such as MongoDB. As the MEF primarily relates to the utilization of PC desktop applications within the context of a small-to-medium-sized office workflow, issues relating to the management of Big Numerical Data are generally beyond the scope of this guide. That having been said, I do encourage everyone reading this to consider [learning](#) how to work with SQL and NoSQL databases.

G-29.1 Why should we be so concerned about the distinctive properties of various datatypes? The reason, quite simply, is that in the ordinary course of business, the datatype under consideration should determine the application utilized to store, process, and view that data. The general app-data matching principle works as follows:

<u>DATATYPE</u>	<u>APP/DATA-STRUCTURE</u>
STATIC STRING	ADOBE ACROBAT PRO
DYNAMIC STRING	MS WORD
SMALL NUMERICAL DATA	MS EXCEL
BIG NUMERICAL DATA	SQL/NOSQL DATABASE

G-30.1 Each desktop app listed above represents a specific data-structure associated with its datatype counterpart. The remainder of this guide is devoted to understanding the logic behind these app-datatype pairings and then, finally, developing a practical mastery of how to use the datatypes (and their associated desktop apps) in a manner that is most efficient for the end-user. However, before diving into specific examples, we must first touch upon some general digital principles of efficiency, which will apply to virtually all of our subsequent discussions moving forward.

G-31.1 The first, most important, most overarching principle you must understand when it comes to any sort of workflow process efficiency is known as DRY (Don't Repeat Yourself). Even if you take nothing else away from this book, **I want you to keep in mind this very simple, yet very important, principle.** In truth, every subsequent facet of the MEF is simply an extension of this broader parent-principle that tells you not to repeat yourself more than you have to.

G-32.1 Commonly preached as an acronym in programming and software development, DRY can actually apply to any given workflow or situation, especially in the digital realm. At its most basic, applying this general principle can simply mean using CTRL+C & CTRL+V to copy/paste from one document to another. However, once you start really going down this particular rabbit-hole, it can move so far beyond that. The art of not repeating yourself can be utilized in any and all aspects of your life, even outside of work. Therefore, a truly maximalist DRY approach seeks to eliminate or automate any sort of unnecessary, redundant, or repetitive task that you can think of. I believe you will be amazed at the productivity improvements that can occur in all manner of pursuits when you consistently apply this simple, yet powerful, algorithmic computer science principle.

G-33.1 In the spirit of DRY, a key setting you will want to enable if you are on a Windows OS is the clipboard, which can be found under **System>Clipboard Settings>Clipboard History** (or just search "Clipboard Settings" in the desktop search bar to get to the same location). With the Windows clipboard setting turned on, by pressing **WinKey & V**, you will now have access to your Windows clipboard, which stores a recent history of the text items (and even images) that you have copied. The clipboard enables you to paste any item that was recently placed there. However, it should be stressed that the clipboard's

G-34.1 storage capacity is by no means infinite, and so it should be considered primarily for short-term use.

The second overarching concept that is broadly applicable across any sort of digital workflow is the CTRL+F principle. This, of course, means using the CTRL+F functionality of your computer to search for relevant data whenever you may need to do so, and to utilize this important feature as a means of first-recourse when looking for new information. While the use of CTRL+F to parse through relevant data might seem extremely obvious to you (if you are in any way tech-savvy) it has been shown in [studies](#) that the vast majority of people simply do not use this extremely valuable feature in order to make their lives that much easier. And even among those who are aware of its existence, only a tiny fraction use this key computer functionality as their **first**, immediate course of action when seeking-out specific information in a digital space. Instead, most people will simply manually scan a digital document with their eyes—as if they were looking through a physical hardcopy line-by-line—and only when they get frustrated, will they resort to actually using CTRL+F.

G-35.1 The third general principle relevant to the MEF is that of Minimalist-Consolidation. We often think of value in terms of addition. For example, we imagine that if we add some new behavior, consumer good, or aspect of media consumption to our daily routine (a pill, a meditative ritual, a podcast etc...), this new element will serve to improve our lives. More often than not, however, inefficiency and unhappiness are the product of having *too much stuff*, not too little. A minimalist approach that focuses on removing elements rather than adding them is often far more beneficial. And to be honest, once you hit peak operational efficiency for a given system or workflow, removing bloat is just about the only way to increase marginal utility still further.

G-36.1 In this sense, clutter of any sort reduces efficiency by its very nature, and this is no less true when creating workpapers (wp) for a given project. Therefore, a key skill to master is the art of taking highly detailed data, removing the unnecessary specificity within that data, and finally, consolidating the most relevant details in a centralized, but minimalist, form. At most, there should be one, maybe two, summary wp files, which should then link-back effortlessly to the relevant details from which the summary values were first derived or calculated. Organizing data in this manner will not only save you a great deal of time now, but will also serve to increase the labor-efficiency of your fellow co-workers and organization for months, perhaps years, down the line. We will see specific examples of consolidation in practice when we transition to the app-specific sections of this guide, but for now, just keep in mind that we always want well-organized summary workpapers to be produced at the end of our workflow.

G-37.1 The fourth general concept which will help us greatly increase the productivity of our workflow is known as [Separation of Concerns](#). As with DRY, Separation of Concerns is a common, foundational principle that is often applied in computer science and software development, which holds that each part of your work should be responsible for a distinct, modular purpose within your broader project.

G-38.1 As an illustrative example, think of a set of Legos. Each Lego piece stands on its own as an independent block, and yet, when combined together, the blocks collectively form a whole greater than the sum of its parts. Each Lego piece is a building module (i.e. it is responsible for a distinct aspect of the final structure), and no one Lego piece interferes with the intended functionality of any other Lego piece. As a result, all of the Lego pieces work together in harmony—at once autonomous entities and yet part of a broader, collective whole. The same sort of modular logic should be applied when you go to create your workpapers. Each workpaper should be responsible for a clearly delineated aspect of the final product being created.

G-39.1 Thus far, we have spoken of Separation of Concerns in terms of creating separate/clearly-defined wp modules, but what of the actual process of data-entry itself? In that case, it should be noted that repetitive & unnecessary data-entry should be avoided whenever possible. For this purpose, using copy/paste to transfer data is the most basic and obvious way to avoid unnecessary data-entry. However, many software programs will also have import/export settings, which can be utilized to transfer entire blocks of data. You should invest the time in learning such software features, and make use of these data-transfer settings whenever it makes sense for you to do so.

G-40.1 That having been said, it is a sad fact of life that sometimes menial data entry is inevitable (or at least not worth automating). In this case, the principle of Separation of Concerns leads us to the view that it is best to work one data property at a time, as opposed to one unique element at a time. For example, let us say we have a list of invoices for which we would like to enter the invoice ID, purchase date, invoice dollar amount etc....There are two ways to go about doing this: 1). enter every piece of data for a single invoice, and then move on to the subsequent invoice to repeat the entire process all over again, or 2). enter a single data property (ID, date, dollar amount etc...) for all of the invoices first, and *then* move on to entering the next datatype over in the adjacent column. You will find that the second method of data entry is generally far superior to the first. Batch-entering one data property at a time allows your mind to concentrate, as your brain doesn't need to constantly switch focus from one datatype to another.

A	B	C	D	E
INVOICE ID	PURCHASE DATE	INVOICE AMT	CLIENT ID	GEOGRAPHIC REGION
2 #2606	4/13/2023	\$344.00		
3 #2334	2/27/2023	\$55.00		
4 #2946	8/11/2023	\$55.00		
5 #1585	11/14/2023	\$66.00		
6 #1313	11/24/2023	\$778.00		
7 #2270	7/13/2023	\$44.00		
8 #2286	2/3/2023	\$44.00		
9 #2096	4/4/2023	\$554.00		
10 #1065	4/15/2023			
11 #2543	11/22/2023			
12 #2859	4/23/2023			
13 #1995	4/9/2023			
14 #1642	1/26/2023			
15 #2374	6/19/2023			
16 #2483	4/3/2023			
17 #2390	8/8/2023			
18 #2187	9/12/2023			
19 #1750	10/23/2023			
20 #2462	7/4/2023			
21 #2693	12/4/2023			
22 #1818	9/14/2023			
23 #2326	8/3/2023			
24 #1320	8/4/2023			

Figure 8 Here, we see an example of batch-entering datatypes in Excel. Note how we are entering one column at a time, not one row at a time. With Materiality active, use the middle mouse button {M_MButton} to jump to the next cell down. Also, using the 10-key numpad mentioned previously really helps speed this process along as well.

Furthermore, the principle of Separation of Concerns can also apply to formatting various files and documents. For example, if you are writing an essay in Microsoft Word, it is generally much faster to write a rough draft of the essay first, before going back to change the font, color, alignment, and other formatting features. Similarly with Excel, it is often preferable to have both default formatting established *before* the beginning of your workflow, *and* to perform a general overview of the Excel sheet at the end of your workflow to check the quality of the final formatting. Doing so ensures that a reasonably polished workpaper has been produced for the next person who has to look at it. Ultimately, the goal of focusing primarily on one task at a time in this manner is to simplify the workflow, and have your brain functioning on auto-pilot, so that you may act without thinking while still being fully awake.

The last overarching concept that we will discuss is the distinction between Form and Function, as applied to digital workspaces, and why Form should generally always follow Function. A good practical representation of the symbolic relationship between Form and Function can be found in the tree-like structure of your computer's file system. In your work, you will typically interact with three primary domains of your PC:

- The Hardware upon which your computer is running.
- The Operating System (OS) running on top of that hardware.
- The Software applications running on top of that OS.

G-43.1 While it is generally unnecessary for you, as an end-user, to have an in-depth understanding of your PC hardware (indeed, even many software developers don't have a great understanding of it), you should be intimately aware of the relationship between your OS and the apps that are running on top of it. Fundamentally, the heart of your OS is a system of filetypes and filepaths that are arranged in a tree-like structure. When you open (i.e. call) an app on your PC (or any other digital device for that matter), your computer will look for a unique file, in a specific folder directory, with a specific file name, and proceed to run that file based on the default app associated with the file's extension. The default app used to run the file can be modified from the Properties menu of the file in Windows Explorer ([M__!LButton](#)).

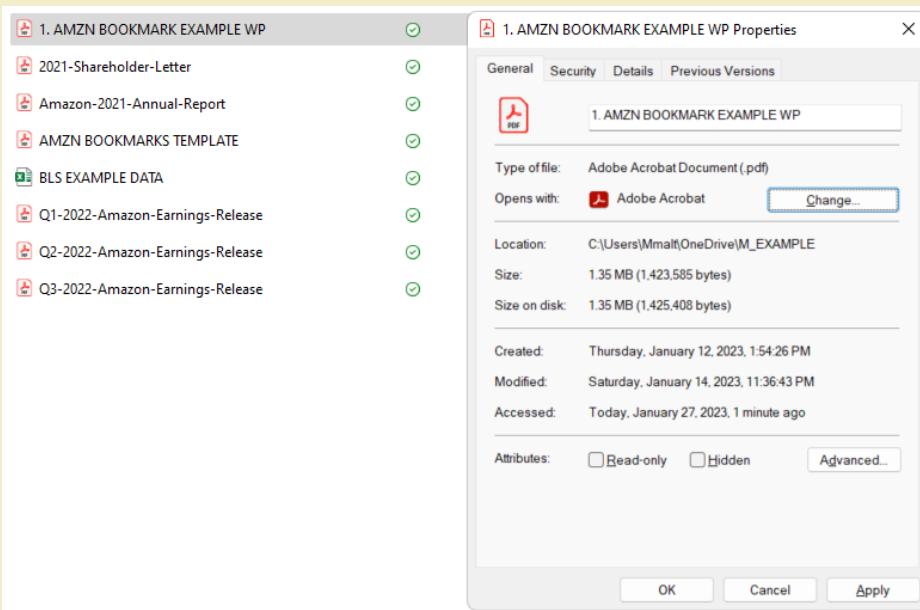


Figure 9 The Properties menu of a file in File Explorer. The default app used to call the file can be modified from here. The purpose and internal contents of the file are the Function, while its external name and icon are the Form.

G-44.1 In the above example, the file itself is the Function, while the file's symbolic-outward representation in the OS directory structure (the name/icon of the file) is the Form. The Form follows the Function via the file extension and desktop app used by the OS to call the file. From a practical standpoint, this critical distinction can enable you to rapidly generate multiple versions of the same file by using the "Save As" feature to save a file with an identical internal state to the original, but an entirely separate outward Form in the filesystem. As we will soon see, the distinction between Form and Function (a concept that in philosophy goes at least as far back as [Plato's Theory of Forms](#)) has extremely valuable Accelerationist uses, when seeking to rapidly iterate multiple templates and versions of the same general workflow.

Section 3: The File Explorer Form Guide

At long last, the base having been firmly established, the time has now come to start working with specific aspects of software—utilizing the theoretical knowledge we have gained thus far. As our last section was on the critical distinction between Form and Function, as seen through the lens of an operating system and its directory structure, it is only fitting that we begin our exploration of the practical uses of various digital programs with the Windows File Explorer itself. In essence, the name of the game when using any sort of OS file explorer is to be able to move rapidly throughout the directory structure, so the amount of time that it takes to access any given file or folder is minimized. Our main tools to do this in Windows are the Windows Taskbar, and the Quick Access menu. The taskbar is there for your most important (i.e. most commonly used) apps. For example, my own taskbar in Windows looks like this:

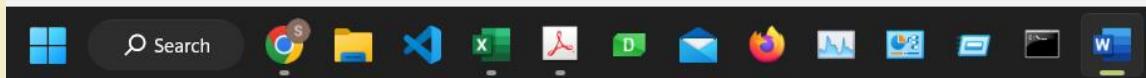


Figure 10 My own windows taskbar. This is the place you want to put your most widely utilized desktop apps. It's free real-estate for efficiency.

Furthermore, by right-clicking on each app in the taskbar, you can view a list of the most recent files called by that app. By clicking the little pin icon on the right-hand side of each file when this menu is open, you can also pin a file so that it will appear at the top of the taskbar menu. This allows you to call a file without going into the File Explorer, or creating a shortcut on your home Desktop, and is the primary method that I personally prefer to access the files/programs that I use on a regular basis.*

Also, when an app is active with multiple instances open, but minimized to the taskbar (having multiple Excel workbooks open, for example), hold down **CTRL & Left-Click** on the app icon in the taskbar to cycle through all open windows of the app—in a similar fashion to how the **ALT & TAB** shortcut works. Ultimately, when setting up your digital workflow, the goal should be to follow what I call the Under-1-Minute-Rule: upon logging into your system, you should be able to access all of the files & folders necessary for your workflow in under 1 minute's time. If you make a habit of following this rule consistently, I believe you will be truly astounded by the increase in speed & efficiency that it enables over the long-term.

*Do not double-click a file on the taskbar if it takes a second or two for that file to load. This can lead to multiple copies of the same file being opened all at once. You don't want that.

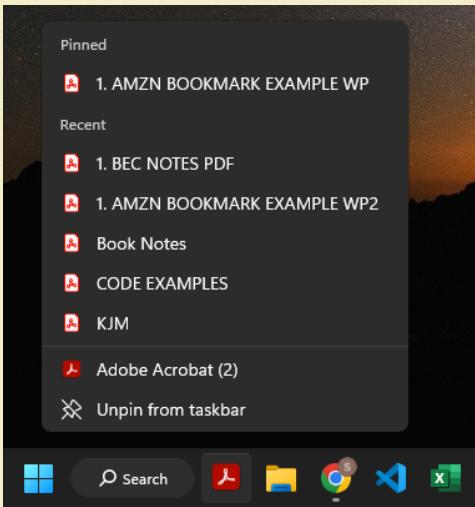


Figure 11 Here, we see how to access recently-used files/folders from the taskbar for any desktop application. In this case, Adobe shows the most recently-accessed PDF files. Note how the file at the top is pinned, so that it will always be visible in this menu going forward.

While the purpose of the taskbar is to provide you with the ability to rapidly activate your most important apps, the Quick Access Menu allows you to pin frequently-used folder directories. The most valuable feature of Quick Access, however, is the ability to go to the location of any recently-used file through the right-click menu of the “Recent Files” section.

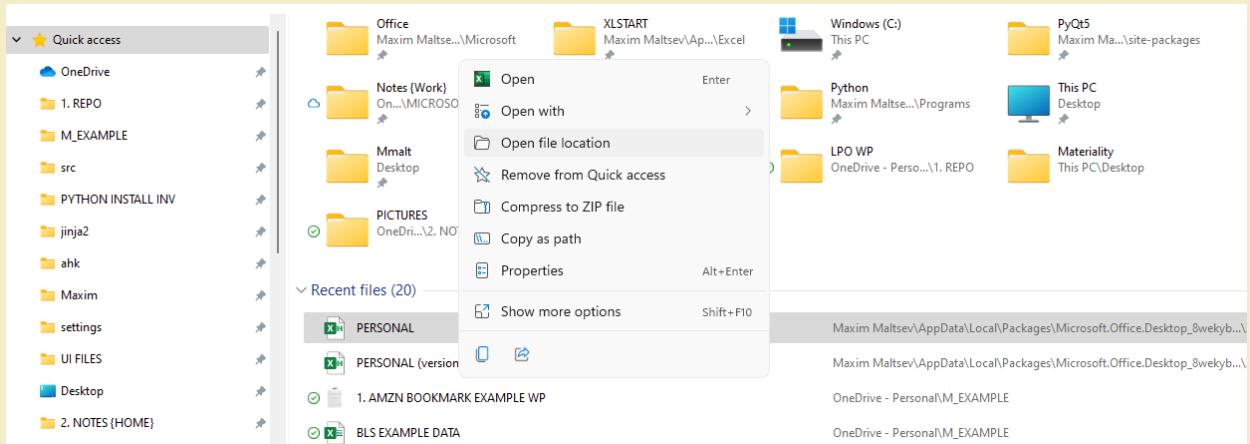


Figure 12 Using the Recent Files section of the Quick Access menu to fast travel to a file's home directory. You can combine this with the taskbar right-click menu shown previously by calling a file from the taskbar, and then being able to instantly access its home folder, since it should now be pushed to the top of the Recent Files stack.

Again, I would go as far as saying that this should be your primary method of navigating to and from various OS directories whenever possible. For a more extensive list of recently-used files and folders, hit **WinKey & R** and type “recent”. The most recently-changed files/folders will be shown on top by default. Finally, if you are dealing with an extremely nested directory structure, it is possible to use the Windows command-line in order to get a visual representation of all the sub-directories of the current parent directory. In order to invoke this interface, go to the directory you wish to outline in File Explorer, type “cmd” into the file path, type “tree” into the command line, and hit enter.

Name	Date modified	Type	Size
window	11/3/2022 7:20 PM	File folder	
templates	11/3/2022 7:19 PM	File folder	
sound	11/3/2022 7:20 PM	File folder	
screen	11/3/2022 7:20 PM	File folder	
registry	11/3/2022 7:20 PM	File folder	
mouse	11/3/2022 7:20 PM	File folder	
keyboard	11/3/2022 7:20 PM	File folder	
gui	11/3/2022 7:20 PM	File folder	
daemon	11/3/2022 7:20 PM	File folder	
__pycache__	11/6/2022 2:01 PM	File folder	

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.1335]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Mmalt\AppData\Local\Programs\Python\Python39\Lib\site-packages\ahk>tree
Folder PATH listing for volume Windows
Volume serial number is 6E24-A1E8
C:.
├── daemon
├── gui
├── keyboard
├── mouse
├── registry
├── screen
├── sound
└── templates
    ├── daemon
    ├── gui
    ├── keyboard
    ├── mouse
    ├── registry
    ├── screen
    ├── sound
    └── window
└── __pycache__
```

Figure 13 You now have the names of all sub-directories/folders graphed-out as shown above from the current directory. This graphical representation can even be copied/pasted with **CTRL+C/CTRL+V** into a Word or Excel file.

G-50.1

Unfortunately, it is not always possible to use QuickAccess to move to your desired directory in the file system. Now, we must turn our attention to the native File Explorer search functionality, which can be notoriously difficult to work with. That having been said, I will demonstrate a few tips & tricks I have picked up on to hopefully make this process as painless as possible, and save you a good amount of time in the process. First, we should utilize QuickAccess to get to the parent directory within which we wish to conduct our search. By placing our most-relevant directories on the QuickAccess sidebar, we give ourselves a common jumping-off point from which to perform the search query for commonly-accessed folders. We also want to configure our Windows Explorer search options like so:

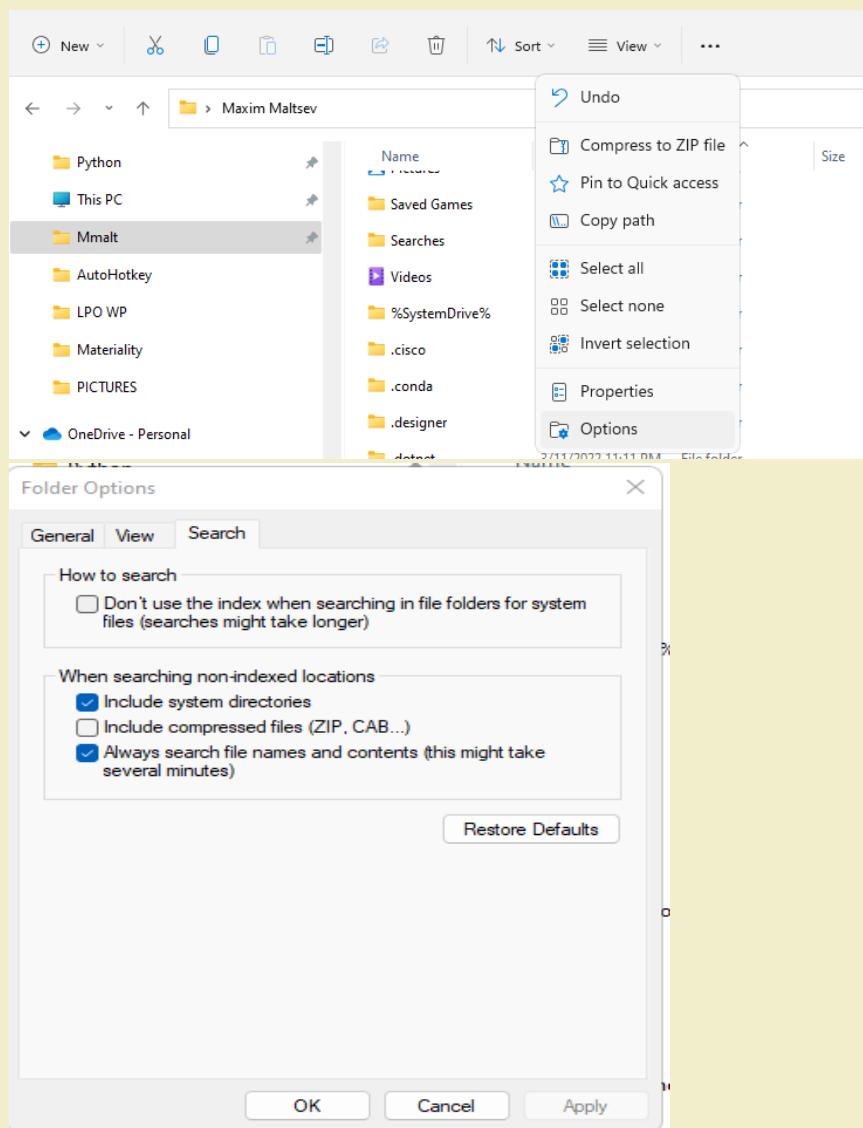


Figure 14 How your Windows File Explorer search settings should be configured.

G-51.1 With this complete, we are now ready to begin typing our search query with the below tips in mind:

- The “ext:” keyword can be utilized to search on filetype. For example, to search for all Excel files, use the query “ext:.xls”. To search for all PDF files, use the query “ext:.pdf”
- RegEx wildcard characters are valid in File Explorer. The most useful of these is the * symbol, which can substitute for multiple characters in a file’s name. For example, to find all folders with the name “David” in them, search “*David*” (without the quotation marks). The * character can also be used to search for specific file extensions if you don’t feel like using the “ext:” keyword. For example, to search for all PDF files using a wildcard character, type in “*.pdf” into the search bar.
- If sub-folders in the directory are based on names (i.e. last name, first name), the search query should follow a similar syntax (example: to search for “John Smith” you would search for “Smith,John”). This generally helps speed-up the delivery of the search results when querying through client files.
- If there are naming conflicts among different files copied over into a single directory in the File Explorer, you should (probably) select to “skip” the duplicate copies: the most recently-edited version of a file subject to a naming conflict will be placed in the target folder first, and this is (probably) the file you actually want.
- Once in a directory, if you know the name of the file/folder you are looking for, you can simply start typing the name of the file/folder without going into the search bar, and the file explorer will instantly jump to that element.

G-52.1 Hopefully, by using the above techniques, you will be able to make searching through a large directory structure a far less daunting task than it would otherwise be. However, sometimes the aforementioned strategies are simply not enough, and we must utilize 3rd party software tools, in order to truly gain mastery of our OS directory structure: this is where Everything comes in. Everything is a desktop app for Windows that can be used to search through your entire file system much more quickly than even the most optimized File Explorer query. The app can be downloaded for free [here](#), and is reasonably self-explanatory in practice. However, I should note that this desktop app does need to be run with admin privileges, and therefore may not be fully suitable to the

G-53.1
needs of large organizations, as there are [concerns](#) that the software may lead to unintended file privilege escalation to unauthorized users.

Having finally arrived at our intended destination, we will now begin examining the files that the directory folder contains. While this is a fairly straightforward process in most cases, when it comes to folders containing a large number of files with a myriad of different file extensions, this can become a rather onerous task. The most valuable and useful advice I can give you here is to make sure that you are in the detailed view in File Explorer, as being in this view will enable you to use various filters to sort the files. The most important of these filters is arguably Date Modified, as sorting by the date/time the file was last modified can give you a rather useful heuristic to finding the most relevant files in the directory. Remember that relevance is always relative to time in nature. If you are looking for the March 2022 PDF bank statement, for example, there is little reason to examine PDF files in the directory which were last modified before that date. Sorting by Date Modified can even give you an insight into how your fellow colleagues have modified various files (i.e. did someone else go in and modify this Excel sheet after I last saved it?).

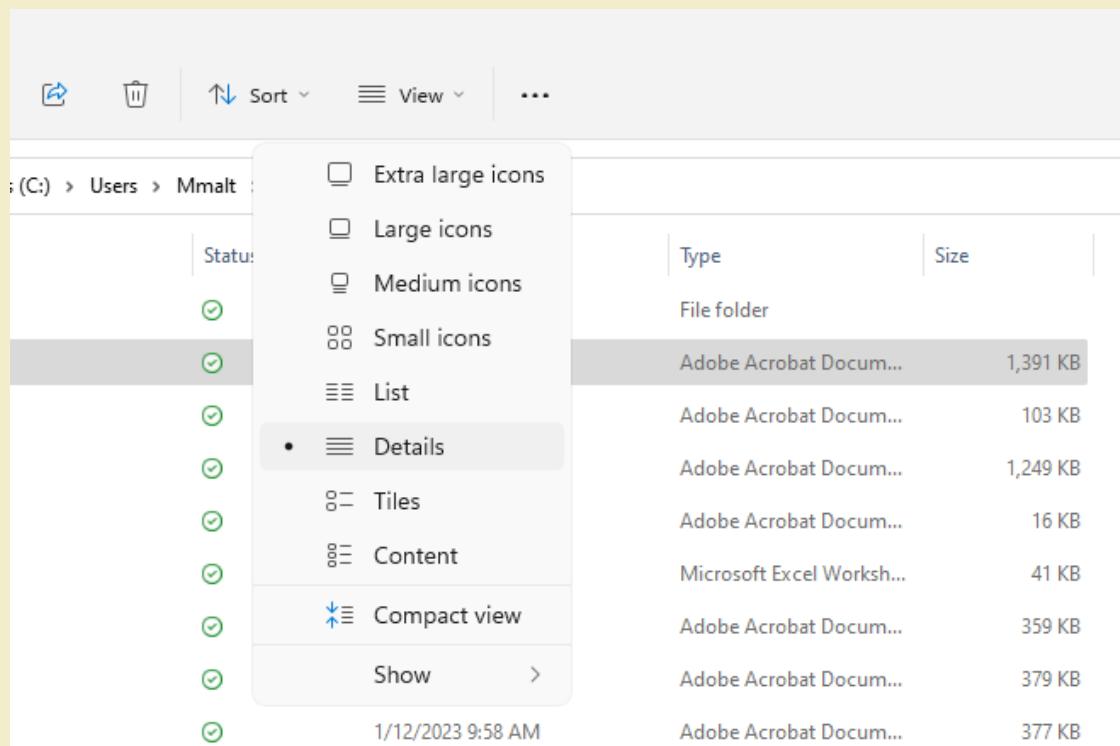


Figure 15 Your File Explorer should be in Details view, so as to enable the full use of various filters provided by the OS.

G-54.1 Other filters available in File Explorer include sorting by filetype (especially useful if you wish to see all Excel, PDF, or other file extensions grouped together in one place), and, of course, sorting by name, which lists the files/folders in alphanumerical order. Speaking of the alphanumerical default sorting, if you want a file to appear at the top of a directory by default, simply put a “1” or a period “.” at the start of the file’s name. This can be a good way to indicate your summary-consolidated wp, and you may even consider numbering your workpapers in order of importance for particularly complex projects located in a single directory. In addition, by going into the **View>Show** menu in File Explorer, you may specify additional information to display regarding the current directory, such as indicating the presence of any hidden files or folders.

Name	Status	Date modified
1. MAIN CONS WP	✓	12/26/2022 7:46 PM
2018 Escrow Statement	✓	12/27/2022 12:28 AM
2019 Escrow Statement	✓	12/27/2022 12:28 AM
2020 Escrow Statement	✓	12/27/2022 12:28 AM
2021 Escrow Statement	✓	12/27/2022 12:28 AM
2022 Escrow Statement	✓	12/27/2022 12:28 AM

Figure 16 A standard directory with workpapers present. The main wp at the top consolidates the subsidiaries.

G-55.1 Before we round-out the File Explorer section, we will discuss the critically important question of version control. The concept of version control relates to our ability to rapidly create multiple different copies of the same file. Let us say we have a particularly sensitive, but difficult, Excel sheet. We want to experiment with this Excel sheet (by changing rows, columns, modifying formulas etc...), but do not wish to break the original file beyond repair. How to resolve this Catch-22? One solution is to create a separate “TEMP” folder directory, which can contain a duplicate version of the original Excel file. We can now experiment with this new version of the file without fear of unduly modifying the original. If we are able to resolve the issue with the Excel sheet, we may even choose to replace the original file with the duplicate copy. Alternatively, we may choose to keep both versions, or scrap the duplicate file and start over again with a fresh copy of the original.

In a similar vein, templates for common workflows and projects can be created for Word, PowerPoint, PDF, or other filetypes. It is also generally advisable to have a dedicated TEMP folder for this as well, and to pin that folder to your QuickAccess menu. However, when creating multiple versions of the same file, be sure to keep track of which version is which: improper version-control practices can end up wrecking you pretty badly, especially if you don't check yourself, and do not maintain proper backup copies. If you do use a template for a certain file/workpaper, make sure to save that specific file/workpaper in a different directory than the template itself, before you begin to work on it. Also, in all aspects of your work, be sure to name files, folders, columns, rows, bookmarks, and other descriptive labels, appropriately: names should be as short as possible, but as long as necessary. Naming things is a delicate balance, and also half the battle of proper digital organization.

Furthermore, in order to rapidly move files and folders between different directories in a graphical user environment, it is advisable to create multiple instances of the File Explorer window, and to place these two or more windows on different screens, or split-screen within the same monitor. To quickly create a second instance of the File Explorer (or any other app) press **M_{_}^+!MButton**. The new window will branch-off directly from your current location, and you can move/copy files as needed to and from this area.

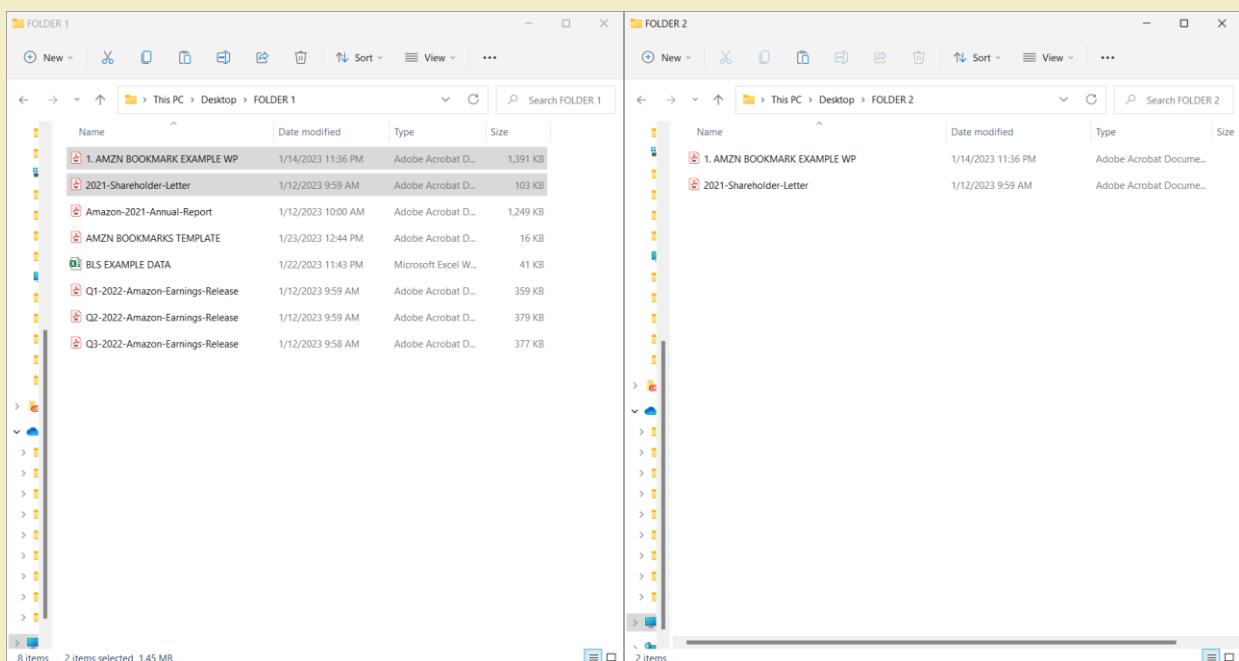


Figure 17 Two separate instances of File Explorer on split-screen. Branch-off a new window of File Explorer with **M_{_}^+!Mbutton**. This represents a rapid way to iterate and copy files in a graphical user interface. Use **M_{_}CapsLock & MButton** to change the names of files quickly and efficiently.

I would like to see this section off on a positive note. In the OS File Explorer, we see the true potential of digital desktop computing to Accelerate the speed & efficiency of knowledge work. Above all, what I want you to take away from this section is not any particular piece of advice, but rather, the liberating sensibility that there need be no true limits when it comes to the digital abyss. The physical world of hardware is difficult. It involves *Stuff*. *Stuff* that has heat, and mass, and is subject to somewhat unfortunate thermodynamic limitations. But the digital world of software is not like that at all, and that's what makes it beautiful. There are no true limits or unchosen ties here. Files are created. Files are destroyed. Directories are created. Directories are destroyed. Extensions are changed. It does not matter. It is liquid. There are always new files, new versions, new possibilities, an infinite Matrix of Currents—all of which may be directed to flow effortlessly in any direction one freely wills.

I know. You think I am a crazy high-functioning autist. I am also right.

Section 4: The Adobe PDF Form Guide

In this section, we will move on to discussing the mysterious world of PDF files with our tour of Adobe Acrobat Pro. We began the theoretical section of this book with an overview of various datatypes. As a reminder, here is a breakdown of the datatypes and their associated primary apps:

<u>DATATYPE</u>	<u>APP/DATA-STRUCTURE</u>
STATIC STRING	ADOBE ACROBAT PRO
DYNAMIC STRING	MS WORD
SMALL NUMERICAL DATA	MS EXCEL
BIG NUMERICAL DATA	SQL/NOSQL DATABASE

As can be seen above, Adobe Acrobat Pro is associated with the “Static String” datatype, which is the term we use to refer to text data that is not likely to change over a short-to-medium time-horizon. Essentially, if Word is the application that we use to *edit* text, Adobe Acrobat Pro is the application that we use to *store* text. To this end, the Adobe PDF viewer gives us several valuable utilities. However, in order to make effective use of these important functions with the Materiality app, it is first necessary to enable Single Key Accelerators under **Edit>Preferences>Use Single Key Accelerators**. Overall, your Adobe Acrobat Pro settings should look something like this:

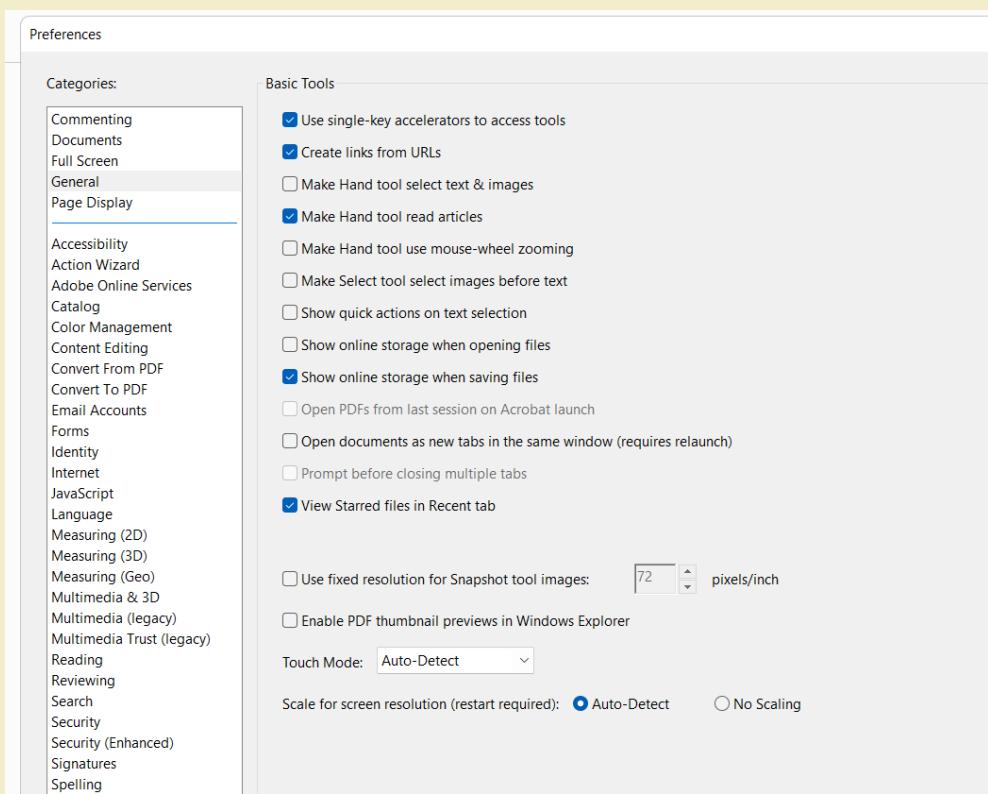


Figure 18 How your Adobe Acrobat Pro settings should be configured.

We will now work through a typical MEF Adobe PDF workflow, in which we will leverage fairly simple software features in order to make interacting with static string data a far more convenient endeavor than it would otherwise be. First, of course, we must create our workpapers. Applying the principle of Minimalist-Consolidation discussed previously, our goal should be to have a single PDF file saved at the top of the project's home directory. Ideally, we should strive to download the source files for our workpapers directly from an online source: doing so is good for the environment (or so I've been told), and helps avoid the hassle of scanning-in hardcopy documents. Alas, we don't yet live in a perfect world in which all offices are fully digitized, and (if downloads are not available) we must first scan-in physical documents before working with them in PDF form.

As far as scanning-in hardcopy documents is concerned, I would strongly recommend buying a [KTRIO](#) Staple Remover to get rid of any hard-to-get-out staples that may be lingering in the physical workpapers. On that note, it is far preferable to use paper clips instead of staples to hold together physical documents: especially if you know that a set of documents will need to be scanned-in down the line. When scanning the documents themselves, use the highest resolution settings available (600 dpi or higher, ideally). Finally, consolidate the workpapers into a single, central PDF file either by

inserting the PDFs into an already-existing file, or using the right-click menu inside the File Explorer directory to combine files.

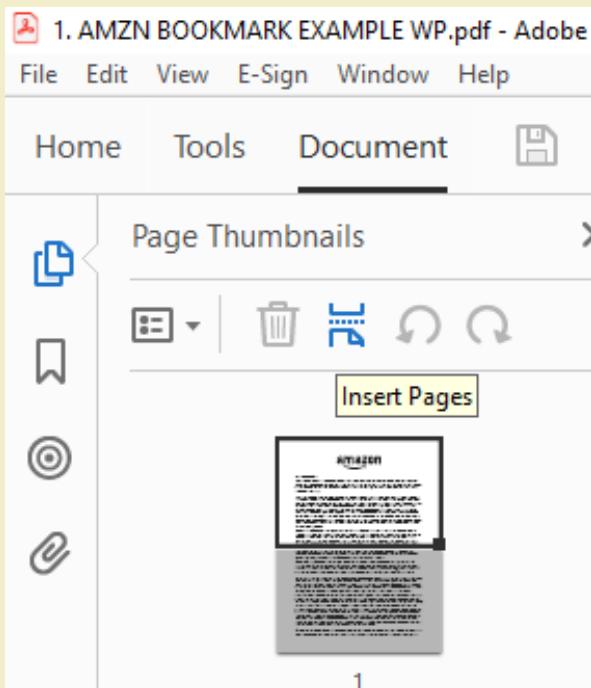


Figure 19 Creating a consolidated set of wp by inserting several PDF files into one.

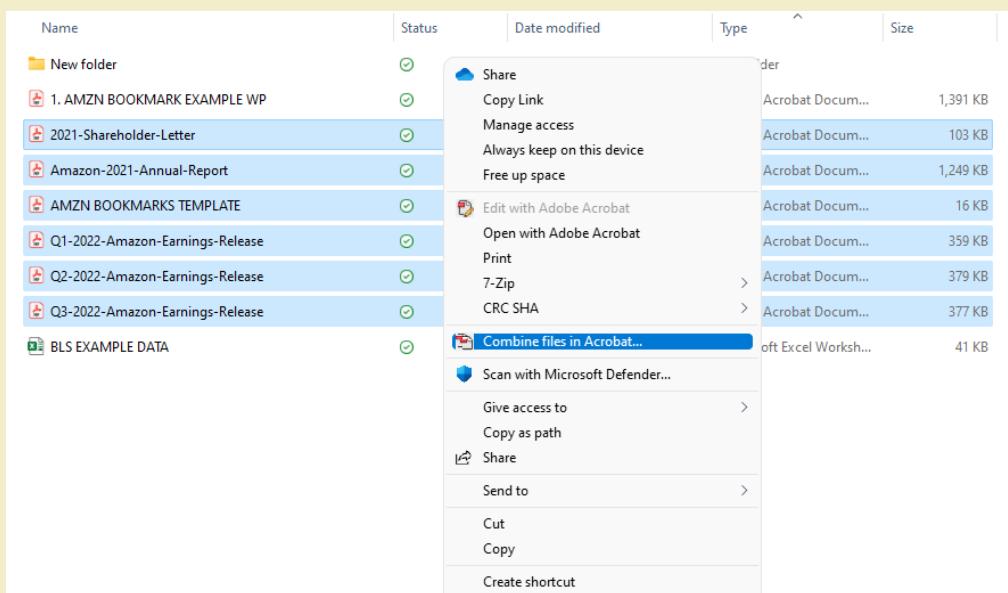


Figure 20 Creating a consolidated set of wp by combining files with Adobe Acrobat Pro. Note how all PDFs inside the directory have been grouped together using the Type filter. To select a range of files all at once, select the first file, hold down CTRL & SHIFT, and select the last file in the desired tranche.

G-64.1 From this point on, the goal should be to keep this main set of consolidated wp updated with any new additions to the project, and conversely, to delete any documents that may yet become genuinely irrelevant to the broader workflow. Since you are operating in a digital workspace, you have full flexibility to mix & match various wp as you please. It is possible, for example, to extract a given range of pages through the right-click menu of the Page Thumbnails pane, as shown below. These separate page-files can then be placed into other directories and PDFs as needed.

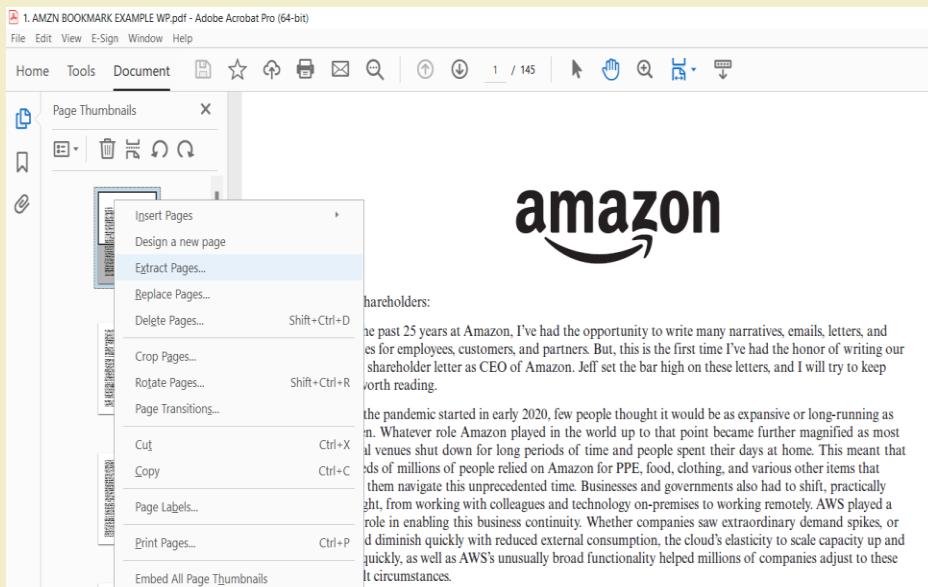


Figure 21 Extracting pages from a PDF. These pages can then be saved as temp files and inserted into other PDFs. This enables various sets of wp to remain dynamically fluid: containing as many documents as needed, but in as few total pages as possible.

G-65.1 Also, when working with an online or offline document that is not in PDF form, strongly consider printing it to PDF with the right-click menu, as an alternative to printing out a physical hardcopy. Doing so has both immense practical benefits in keeping all of the advantages of a fully digitized workflow, and does the planet's forests a favor as well. Furthermore, if you do need to physically print certain documents to hardcopy from a large PDF, remember that you can print individual pages by placing a comma between each page, and you can print a continuous range of pages by placing a dash-line between the first and last page of the range you would like to print:

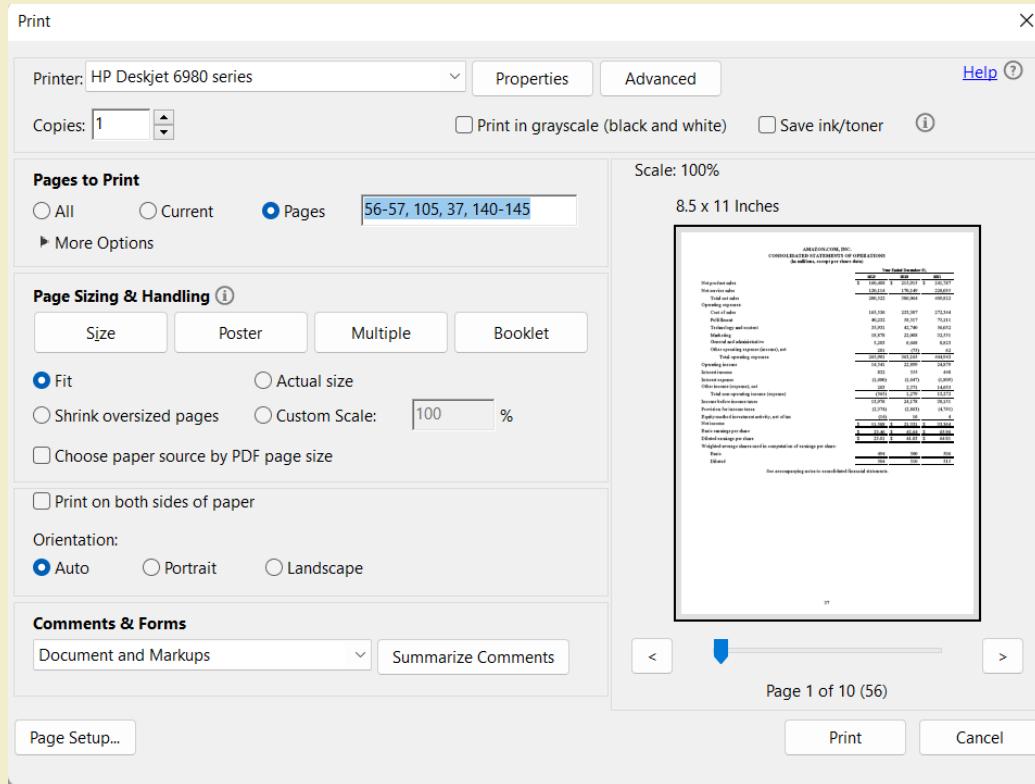


Figure 22 Physically printing only those pages actually necessary, while keeping the rest of the wp purely digital. Use commas to separate individual pages. Use dashes to indicate continuous ranges of pages to print. Use the preview pane on the right-hand side to get an overview of what parts of the PDF will actually be sent to the printer. Also, remember that it is possible to print one PDF file to another PDF file in this way as well.

G-66.1
Physically printing to hardcopy only those pages of the PDF you actually need will save you, your organization, and society as a whole, a significant quantity of wasted resources. Of course, the ultimate goal for our civilization in general should be to transition as quickly as possible to a completely digitized, paperless, remote office environment: hopefully the MEF (and you) can be at the vanguard of that transformation.

G-67.1
Now that we have compiled our workpapers into a single, central PDF file, we are finally prepared to start outlining & analyzing the actual substance of what has been brought together. Arguably the most important tool that Adobe Acrobat gives you in this regard is the ability to run Optical Character Recognition (OCR) on the documents you have compiled. OCR takes a scanned document image and converts it to readable text, which may be searched, copied, pasted, highlighted, and otherwise marked-up at will. Alternatively, it may not be necessary to run OCR, if text for all documents in the PDF file is already readable, but I always like to do so just in case.

The OCR functionality can be found in Adobe under **Tools>Text Recognition**. You can add OCR to your Adobe Acrobat toolbar by accessing “Customize Quick Tools” in the right-click menu of the toolbar.

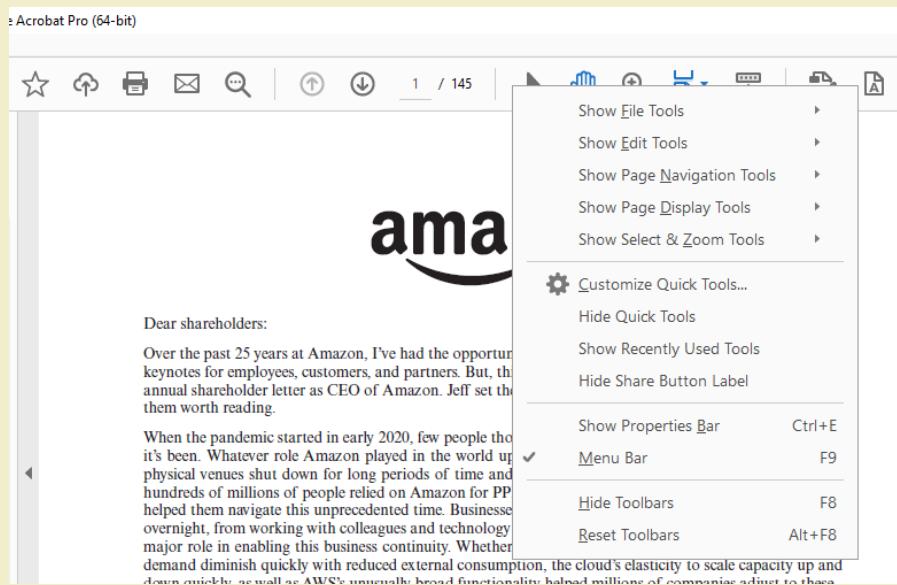


Figure 23 You can access the Adobe Quick Access Toolbar with “Customize Quick Tools”.

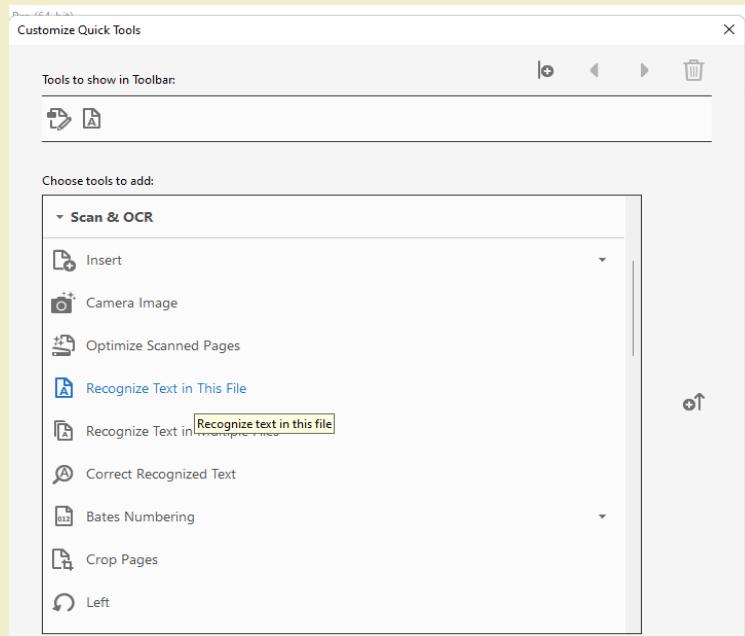


Figure 24 Now, it is possible to select OCR from the list of potential tools.

It should also be noted that Adobe’s OCR does not play nice with pictures/screenshots that have been copied/pasted into the PDF file. For example, if you take a screenshot of a PowerPoint slide with **WinKey & Shift & S**, and copy/paste that screenshot into a PDF, the OCR will not recognize it, and in fact, may throw an error

when scanning the page. To resolve this somewhat irksome issue, save the entire PDF as a series of TIFF files, combine the TIFF files into a consolidated PDF using “Combine In Acrobat”, and run OCR on the resulting file. The above work-around is generally not ideal, as it can take some time to perform, so if you can live with a portion of the text not being searchable, you should do so. Still, if you really want every single string element inside the PDF to be recognized as such, this is a decent way of getting there.

Now that our wp have been properly consolidated, they must be outlined so that the data is easily accessible. The most useful tool in your arsenal for outlining a set of PDF workpapers are PDF bookmarks, which can be created with **CTRL & B** in Adobe Acrobat (and most other PDF reader applications as well). Furthermore, it is possible to sub-class bookmarks by dragging one bookmark underneath another bookmark: this creates a parent-child graph relationship that can be used to label & organize data within the PDF. Individual bookmarks can also be color-coded to further refine the symbolic relational graph structure. To apply a color/highlight to a bookmark, go into that bookmark’s Properties menu (**M**__**!LButton**), and select the desired color for that bookmark, as well as selecting to **bold** the bookmark for additional emphasis.

As to the general principle for *what* sort of text/string data you should bookmark, a good rule-of-thumb is to bookmark any page that is either highly important, or any page that will likely need to be looked at more than once. Have you ever had a situation where you needed to find a particular document, but could not do so? Well, thanks to PDF bookmarks (and the MEF) you no longer have that particular problem going forward, assuming, of course, that you actually remember to bookmark/outline on a consistent-enough basis across all of your digital workflows. Also, to rapidly move through the PDF as you are creating the bookmarks, it is good practice to use the {PgUp} and {PgDn} buttons on the keyboard to rapidly cycle pages (the equivalent Materiality hotkeys are **M**__**+Tab**, **M**__**+CapsLock**). Also, when outlining important documents in this manner, you need not read each page line-by-line: it is generally more efficient in most cases to just visually scan the major headings/labels of each page/table to see if the document contains information that ought to be bookmarked.

An additional point that deserves mention with regard to creating PDF bookmarks is that you (or another person in possession of a reasonably-functional brain) should be the one to create the bookmarks. I know the setting of PDF bookmarks is a tempting thing to try to fully automate, but—going back to our initial discussion of basic automation principles and assumptions—this utterly fails to account for the differences between humans and machines, or the inherently-symbiotic comparative advantage of one relative to the other. As they say, a picture is worth a thousand words, so here is a contrast

between bookmarks as created by a human vs. bookmarks as generated by a computer programmed to label each page/section:

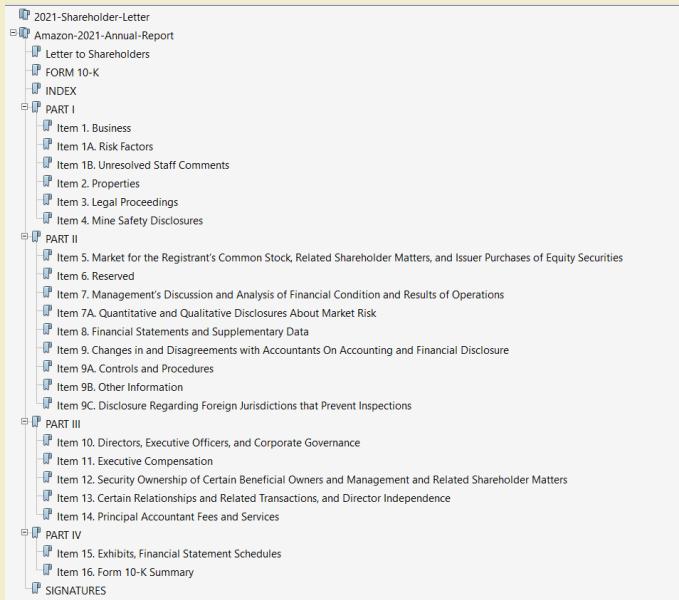


Figure 25 Auto-generated bookmarks created by a computer. Not bad per se, but the bookmark space is far too valuable to merely serve as a completely exhaustive Table of Contents. Bookmarks should be reserved for the most important aspects of a file, as outlined by the person or team actually responsible for the project.

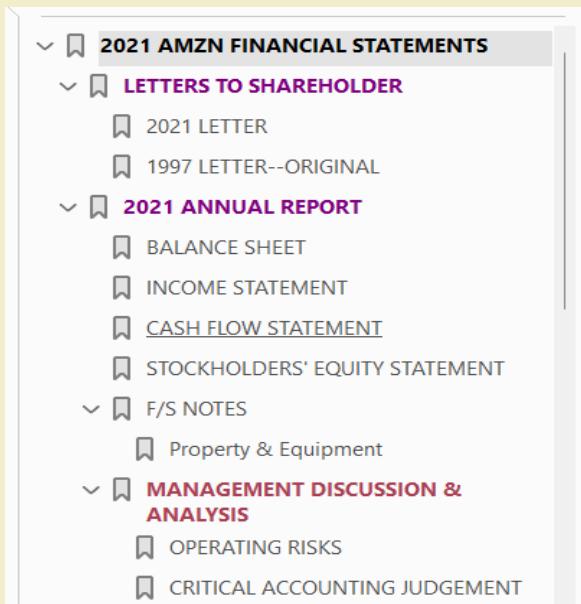


Figure 26 Bookmarks as created by the person actually working with the PDF: far fewer in number, but far more concise and relevant in nature. A guide to the most critically important aspects of a project that follows the workflow as it organically develops.

G-73.1 As you can see, the bookmarks created by a human being—when compared to the machine-generated bookmarks—are lesser in overall quantity, but far greater in overall quality. If we are to speak of Form and Function in this instance, the bookmark itself is the Form, while the underlying page/document labeled by the bookmark is the Function that the bookmark points to. It is true that the machine/computer software program (in this case, the bookmark auto-generator) can assign a Form based on some arbitrary characteristic of the underlying structure, but it can never fully *grasp* the fundamental Function when making this assignment to unstructured data (unless some sort of AI is used, and even then, full comprehension is hardly guaranteed).

G-74.1 In addition, because it cannot understand the underlying Function, the machine/computer also fails to prioritize which bookmarks are truly necessary for the workflow file in question, and which bookmarks do not need to be created in the first place. With this in mind, if too many superfluous bookmarks are generated, much of the power of PDF bookmarking as a tool of digital organization is lost to the wind. Efficiency is not fire. It is venom. It is strengthened by deliberate concentration, yet weakened by frivolous dilution. And so, by the very act of increasing the numerical instances of a thing, you serve to lower its ultimate value.

G-75.1 Poetic license aside, the bottom-line is this: create only as many bookmarks as are truly necessary, and sub-class them as appropriate into organically defined, common-sense, parent-child graph relationships. You can reset the location of a given bookmark by right-clicking on the bookmark, and either selecting “set destination” with your mouse or hitting the “**A**” key on your keyboard.

G-76.1 Also, to select a bookmark without traveling to its destination, **right-click on it** and hit “**ALT**” on the keyboard. With the bookmark now selected, you can change its name by hitting “F2” (**M CapsLock & MButton**). Overall, remember that your fellow colleagues and co-workers will probably be required to examine the workpapers that you leave for them. Take responsibility for the wp that come across your desk (or screen). Keep in mind that in the Forms you create, you are telling others a story about the underlying Function of the data: make sure the story is told in a way that you can be proud of, and that will serve to make your life—and the lives of those around you—just a little bit easier.

G-77.1 Of course, this discussion of PDF bookmarks would not be complete without briefly touching-upon the bookmark zoom setting, which determines how zoomed-in or out the user view will be when the bookmark is called to its target destination. Across organizations, it is necessary to standardize the zoom-setting of each bookmark, since screen sizes/resolutions tend to vary depending on the PC monitor being used. In order to achieve this zoom standardization, we have two settings at our disposal: Fit To Page

and Inherit Zoom. Fit To Page (as the name implies) fits the screen to the page, and can be set in the properties menu of the bookmark (**M**__**L****Button**). You can also bold/color-code the bookmark from this same properties menu as well. Alternatively, you can also set Fit To Page on the bookmark by creating the bookmark while your zoom setting is in the corresponding Fit To Page mode (**M**__**^M****Button**).

Inherit Zoom is the more dynamic of the two resolution options, as it automatically adjusts the zoom of the bookmarked page to whatever the viewer's zoom setting was at the time that the bookmark was called (so two different users, on two different PCs, with two different zoom settings, will each maintain their own respective views). Inherit Zoom can also be set in the Properties menu, but is best activated as a default setting under **Edit>Preferences>Page Display>Zoom**.

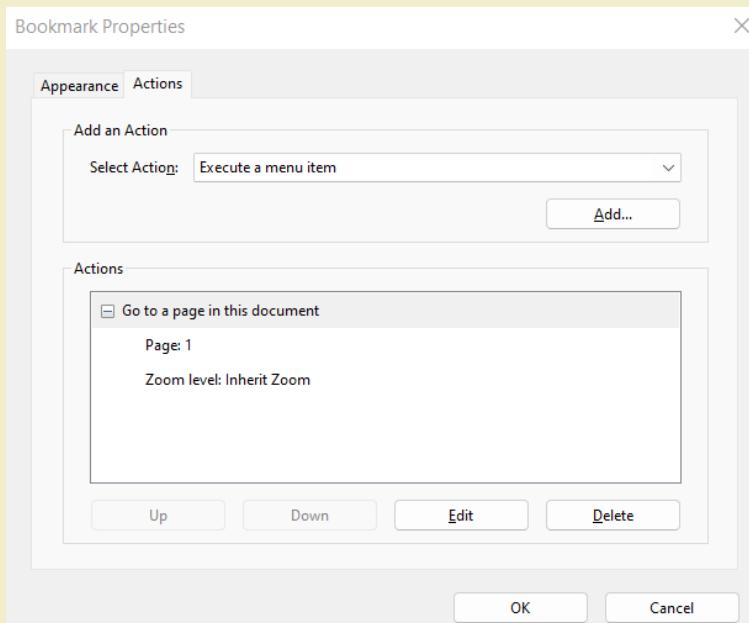


Figure 27 Manually setting inherit zoom on an Adobe bookmark.

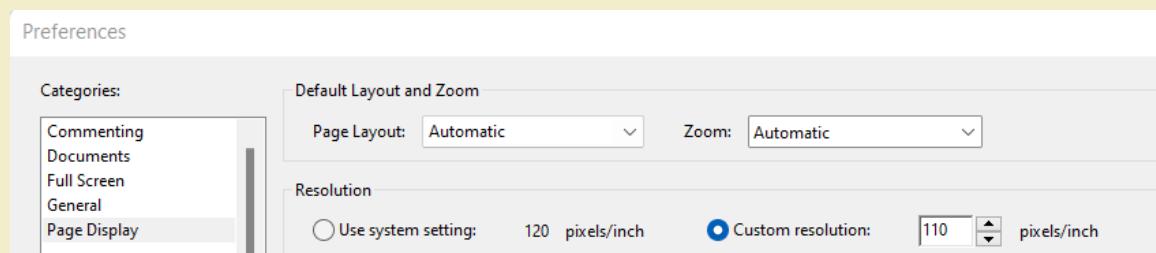


Figure 28 Set inherit zoom for all bookmarks by default. Note: this setting may not be available in older versions of Adobe Acrobat.

G-79.1 Now that our wp have been fully consolidated & outlined, we will go over a number of useful utility tools that will enable us to rapidly find the data we need, and effectively mark-up relevant information inside the PDF. First, we will discuss highlighting within the PDF. To transform your cursor into a highlighter in Adobe, make sure single key accelerators are turned on and press the “U” key on your keyboard, or the corresponding Materiality shortcut (**M**Tab & RButton). You can now highlight text inside the PDF file as you wish.

G-80.1 Good note-taking and highlighting principles apply here just as much they do in the context of a physical notebook. Generally speaking, keep your highlights limited to data that is of high importance to you, your colleagues, and/or your entire organization. Highlights you have already created can be selected and changed by pressing enter twice (or hitting **M**MButton 2x). The default highlight can also be set from this properties menu as well. Also, by pressing the “S” key on your keyboard, you can leave a comment anywhere in the PDF. Comments can be used to append additional info to your documentation in the form of free-floating sticky-notes. You can filter/search through all highlights, comments, and other mark-up elements of a PDF file by utilizing the Comment section of the Tools pane. When used concurrently, bookmarks, highlights, and comments enable you to keep all workflow-relevant knowledge in one place, and to be able to access this data instantly.

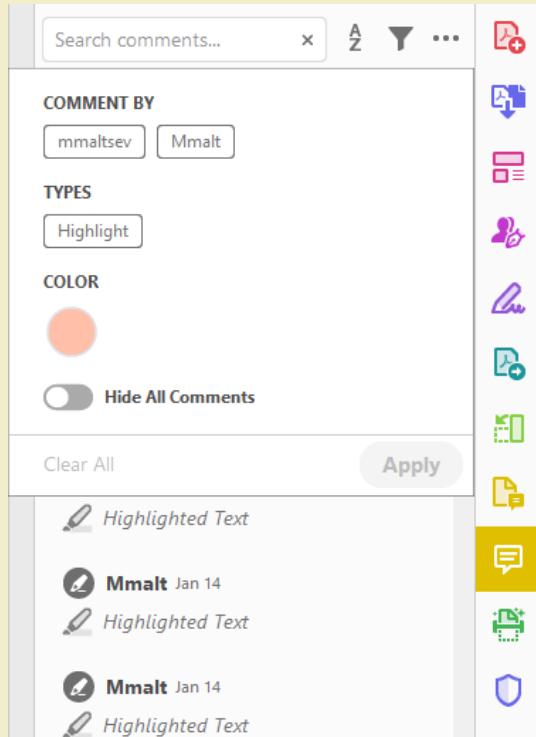


Figure 29 Use the **Comment** section of the **Tools** pane to get an overarching view of the various mark-ups present inside the PDF file.

The next few utilities we will discuss are the hand-tool and the search function. The hand-tool can be activated by pressing the “H” key (**M__Tab & MButton**), and can be used to keep your cursor steady on a single horizontal axis of the PDF. This tool comes in handy when you have a list of corresponding values across the width of the PDF that need to be matched-up to one another. Essentially, the hand-tool enables you to line-up values across the breadth of the PDF in much the same manner that a ruler may be used to examine a hardcopy document on a line-by-line basis (only much faster). However, in order to keep the hand-cursor steady, your view should be somewhat zoomed-out, such that the edges of the page should be visible on your screen. To transform your cursor back into a normal mouse selector, press “V” (**M__Tab & LButton**).

AMAZON.COM, INC.
CONSOLIDATED BALANCE SHEETS
(in millions, except per share data)

	December 31,	2020	2021
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 42,122	\$ 36,220	
Marketable securities	42,274	59,829	
Inventories	23,795	32,640	
Accounts receivable, net and other	24,542	32,891	
Total current assets	132,733	161,580	
Property and equipment, net	113,114	160,281	
Operating leases	37,553	56,082	
Goodwill	15,017	15,371	
Other assets	22,778	27,235	
Total assets	<u>\$ 321,195</u>	<u>\$ 420,549</u>	
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 72,539	\$ 78,664	
Accrued expenses and other	44,138	51,775	
Unearned revenue	9,708	11,827	
Total current liabilities	126,385	142,266	

Figure 30 Use the bookmarks to get to where you're going. Use the hand-tool to find what you're looking for. Use the highlights to ensure that you won't ever have to look for it again. Simple as that.

The last utility tool for analyzing PDFs that we will discuss is the good old CTRL+F search function. An extension of the CTRL+F principle discussed way back at the beginning of this guide, Adobe's native search functionality gives us a number of interesting features worth elaborating on.

But first, I cannot emphasize enough how important it is that you get into the habit of using CTRL+F as your **first** and **primary** method of finding information inside a PDF, or any other digital workspace for that matter. The MEF has many moving parts, and I will be the first to admit that it can be quite overwhelming at times (even for me). That having been said, about 80% of the productivity gains of this system emerge from making a habit of 1). using CTRL+F as your primary means of finding information, 2). utilizing bookmarks to save the location of important data, and 3). using CTRL+C/CTRL+V in

order to avoid unnecessary/menial data entry. That's it. Consolidate your workpapers, adopt these three extremely simple practices on a consistent-enough basis, and you will be well on your way to being vastly more efficient than the vast majority of your peers. On that note, when it comes to searching through a PDF file, there are a number of distinctly useful techniques I have picked up on:

- Identify unique values and search on them. For me, as a CPA, unique values typically come in the form of account numbers and client IDs, but for you, the relevant unique values may be different (invoice identifier codes, phone numbers, zip codes etc...). For example, you can search for “\$” to identify all monetary-dollar amounts in a business contract.
- Search for Bookmarks: You can search for bookmarks by going to the top of the PDF (**M** + **Tilde**), selecting “Include Bookmarks” in the search bar menu, and typing the name of the bookmark as the search query. You can also use this sub-menu to search all comments in the PDF by selecting “Include Comments”.

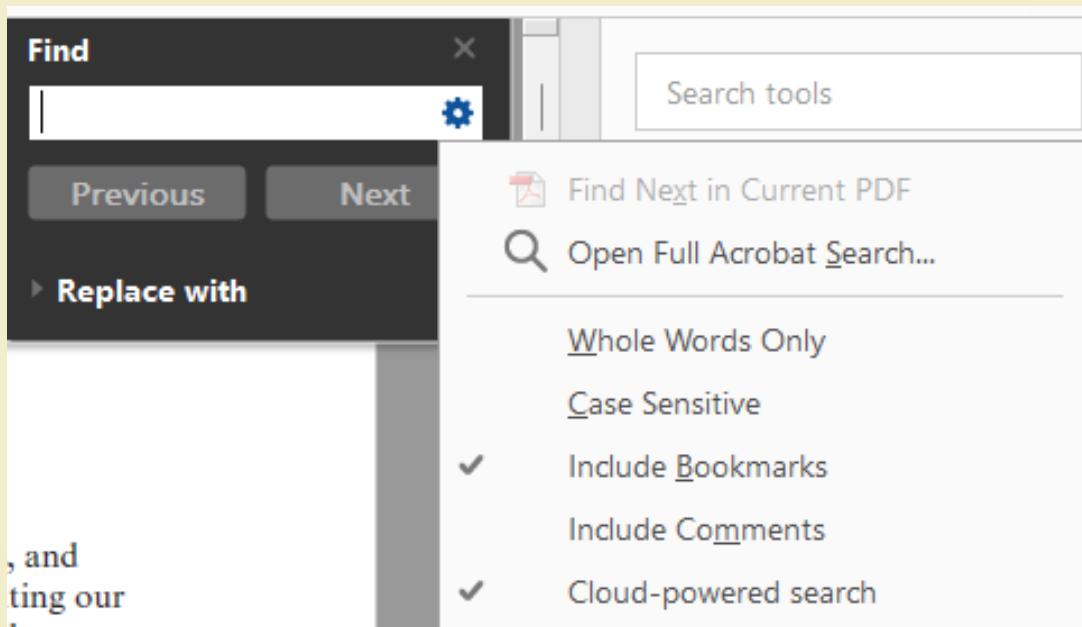


Figure 31 Search for bookmarks and comments inside the PDF. Also, turning on cloud-powered search in the latest version of Adobe can offer you helpful suggestions as far as what terms to search for.

- Understand how the PDF search algorithm is structured: in Adobe, the search process starts at the current page at the time the search function is called, and continues on down the PDF file, before circling back around to the current location from the top. This means that—as long as you maintain the same query in the search bar—you can scroll down to skip one or more pages, and have the initial search query continue uninterrupted from the page you have just scrolled to.
- Utilize Advanced Search: To utilize the Advanced Search feature, select “Open Full Acrobat Search” from the search bar menu. Advanced Search has a number of advantages, including the ability to search multiple PDF files located in the same directory, as well as providing a separate dialog box in which search results are displayed.
- A pair of Materiality hotkeys that combine really well with Adobe’s search functionality are **M_^!LButton** and **M_^!RButton**. These two keyboard shortcuts enable you to move between your most recent back and forward page views. For example, to return to the prior-page you were on before search was initiated, use **M_^!LButton** (the back-page view), and to cycle from there back to the search result use **M_^!RButton** (the forward-page view). This set of hotkeys can also be extremely useful if you accidentally lose your place inside a large PDF file, and need to quickly return to the correct location.

G-84.1 The last topic related to PDF files that we will touch upon is the use of links & destinations. Hyperlinks to other documents on your PC (or the web) can be created by going into **Tools>Content Editing>Add or Edit Link** (I would strongly recommend placing this hyperlink feature on the Adobe Quick Access Toolbar as well). This functionality allows you to create an internal or external link by drawing a rectangle around a given area inside the PDF. In this menu, by selecting the Custom Link section, you can specify the target location of the link.

G-85.1 In a similar vein, destinations allow you to create connected waypoints inside your PDF that are far more robust than ordinary links, which are tied to page numbers by default. The problem with linking to a page number is that, if any page before the link is deleted, the link will not point to the page it was originally intended to point to (interestingly, this problem doesn’t seem to occur with bookmarks). Destinations can be accessed by right-clicking on the ribbon that contains the bookmark pane, and adding destinations to the ribbon. Once a destination has been set, it can be linked to from the Links menu discussed previously—allowing for a much more robust system of cross-referencing throughout the PDF file.

G-86.1 To enable this cross-referencing, first create a normal link to a page number, and then edit the properties of that link so that it points to a destination, instead of the page number that was originally associated with the link.

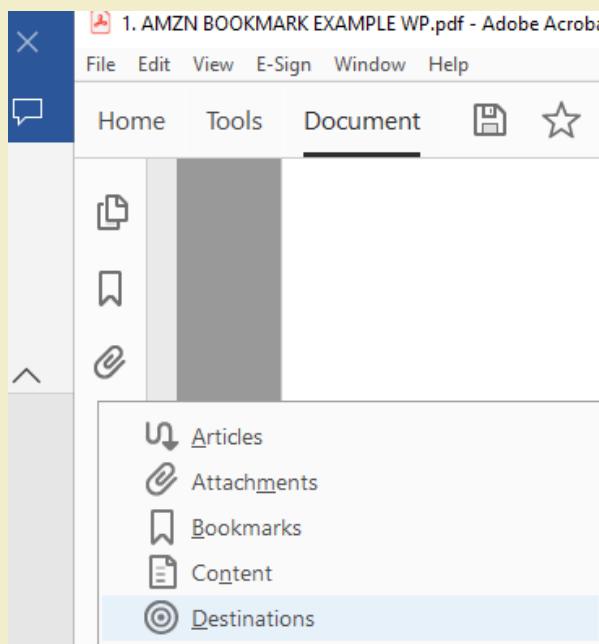


Figure 32 Adding Destinations to the left sidebar.

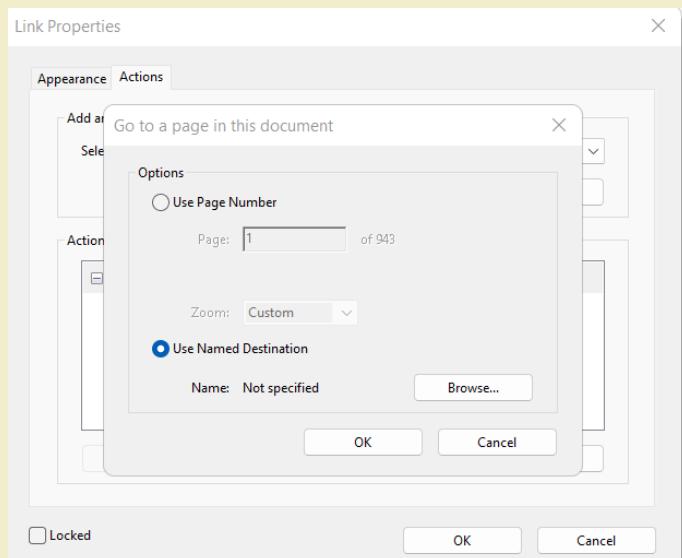


Figure 33 Setting a link to point to a Destination. A normal page-number link must first be created, and then its properties menu edited.

G-87.1 And with that, our tour of Adobe PDF files ends. Hopefully, you had fun and learned something you didn't quite know before. I know. I am kidding about the fun part.

Section 5: The Word Form Guide

The next commonly-used office software program that forms a key component of the MEF is Microsoft Word. Remember that, while we use Adobe Acrobat to *store* static string data, we use MS Word to *edit* dynamic string data. At its heart, Word is a fairly straightforward text editor, which nonetheless gives us a number of interesting (and potentially little-known) features to work with. One seemingly underappreciated functionality that I would bring to your attention is the ability to create bookmarks at specific points in the document (I hope you're starting to notice a pattern with regard to the use of bookmarks so as to enable digital workflow efficiency).

The best way to create a bookmark in Word is to select the line of text you wish to bookmark, press **M_CapsLock & F1**, paste the text inside the dialog box, then either press the enter key or hit **M_MButton** to finish creating the bookmark. When doing this, no spaces should be present in the bookmark's name: underscores can be included with **M_CapsLock & F2** in order to separate terms. While Word offers far fewer options to customize/organize its bookmarks, as compared to Adobe PDF, creating Word bookmarks allows for extensive added flexibility when writing/editing text, and otherwise navigating the dynamic workflow of a Word document.

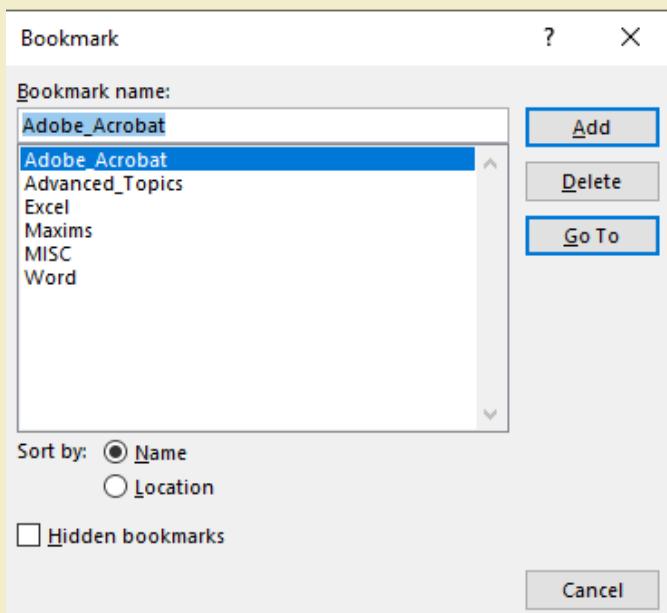


Figure 34 The Word bookmarks I used while writing the first several drafts of this book. Bring up the bookmark dialog box with **M_CapsLock & F1, and copy/paste the bookmark name directly from the Word document itself. Use an underline to separate multiple terms.**

G-90.1 Another useful feature of Word that many everyday users may not be fully aware of is the ability to change sentence case with the **Shift & F3** keyboard shortcut. This alternates the case of your text among the UPPERCASE, Capitalize Each Word and lowercase forms. Furthermore, with default Materiality settings active, text within MS Word (as well as most other apps) can be selected by holding down the **Tab** modifier key and pressing the standard **WASD** keys to select up, down, left, and right. As far as navigation goes, **M \wedge x** moves your cursor to the beginning of the line, while **M \wedge +X** moves your cursor to the top of the document. On the other hand, **M \wedge !Mbutton** moves your cursor to the end of the line, while **M \wedge !MButton 2x** moves your cursor to the bottom of the document. And lastly, you can press **CTRL & G** to activate the Go To menu, which allows you to instantly zoom to various pages, lines, and bookmarks in the file.

G-91.1 As for formatting text in Word, it is generally advisable to apply highlight colors either from the pop-up menu that displays whenever you select a section of text, or to apply the formatting from your Home tab. Then, whenever possible, use the Word format painter to copy/paste formatting with **\wedge +C** and **\wedge +V**. Using the format painter in this way saves you a good amount of time, as you no longer need to manually implement the specific settings of a certain formatting style in order to apply it.

G-92.1 The format painter can even be used to apply Headings quickly (or to remove Headings that have been applied by copying-over the formatting from a “normal” block of text). It should also be noted that Word Headings apply on a per-line basis, so only a single character in a line must have the Heading Type applied to it for the Heading to apply to the entire line. Finally, I strongly recommend using justify text (**\wedge J**) to structure the outline of your paragraphs, as it does make the layout of your document appear both more concise and professional in nature.

G-93.1 By using the various navigation and formatting tools outlined above, you should now be capable of rapidly moving to anywhere you need to in your Word document, as well as selecting, copying, pasting, and doing all that is necessary when you get there—all without taking your right hand off the mouse. Remember that the ability to reconcile the convenient use of the mouse with the efficiency gains inherent in the constant utilization of various keyboard shortcuts is the fundamental innovation of Materiality and the MEF. It is the means by which Form follows Function, and the theoretical is made truly practical.

G-94.1 The above concludes our (somewhat brief) exploration of the specific features of MS Word. However, there is a more meta aspect to the use of this common office software that I would like to discuss as well. This aspect relates to the incredible success that I have personally had in using Word as a separate repository for my note-taking. Why use Word as a (somewhat crude) note-taking app, when more *sophisticated* note-taking solutions are readily available? The answer relates to the broader principle of minimalist-consolidation discussed previously: every additional app that you add to your digital toolkit is one more task window that you need to manage. It is ideal to minimize this to the extent possible.

G-95.1 As a general rule, the information & data that you add to your iterative set of personal notes should meet the following three criteria:

- The information is relevant to your work.
- The information is not simply common-sense.
- The information cannot be easily remembered or obtained on Google, or another, similar search-engine directory.

G-96.1 Nothing else (besides the conceptual items listed above) need be included in your personal iterative work notes. And believe me, notes that meet the rather strict criteria outlined above can still run well into the hundreds of pages.

G-96.1 With regard to the structure of the iterative notes themselves, don't worry too much about actually organizing the notes, since (as long as each discrete note item is labeled with some heading or brief text description) you can always use CTRL+F to find the information you need to anyway. This is absolutely one of the key reasons I stressed the importance of the CTRL+F principle early on in this guide. It isn't simply a matter of you being able to find the information quicker. Yes, it is that, but the much more important dynamic is that precisely *because* you can now instantly find very specific information in a very large data set, you are now free to consolidate your relevant data into vastly greater workpaper sets to begin with. This extensive capacity for data-centralization is one of the key comparative advantages of using digital mediums, as opposed to physical mediums, to perform knowledge work.

G-97.1 A good example of one domain where taking high-quality personal notes really pays off is in working with any sort of specialized company software. For example, if you have a problem with the software that you, or your co-workers, discover the solution to, *write it in your notes*. Similarly, if you manage to figure out some tip or trick with the software that helps you become more efficient with it, *write it in your notes*. For that

matter, take a screenshot of the solution/advice with **WinKey & Shift & S**, and copy/paste the resulting screenshot *into your notes*. You get the idea. However you decide to go about it, I hope that I have imparted to you the value of taking an evolving set of personal career notes, upon which you can iterate over time as you gain experience & competence in your chosen field. Remember that your personal work notes are a travel-log of your professional journey, and so they should be allowed to naturally adjust to the needs and structures of your organically-evolving workflow—similar to how an overgrown tree, in the ruins of a post-apocalyptic urban civilization, may gradually become one with the cracks and crevices of its mechanical surroundings:



Figure 35 What your personal work notes should look like, metaphorically speaking.

Our last topic to round-out the Microsoft Word section will focus on the value of having an Ending Diagnostics Checklist and an Open Items List as part of your workflow. So let's say you're getting to the end of whatever project you're currently working on. How do you add that last bit of extra polish to your final end-product? The simple answer is to use an Ending Diagnostics Checklist. The Ending Diagnostics Checklist should contain all of the necessary actions that need to be taken before completing and submitting the relevant project for review. Perhaps there is some critical aspect of the deliverable that needs to be double-checked, or a box that has to be ticked-off for compliance reasons, or that one annoying thing that's so arbitrary, you always forget to do it: just add it to your Ending Diagnostics Checklist, and go through it at the end of every workflow with peace of mind.

G-99.1

With a similar frame of reference, it is also a good idea to maintain and update a list of any open-items for the deliverable that remain yet unresolved. Using such an open-items list to keep track of what is to be done to bring the project to completion lends consistency & polish to your work, so you can come back to a project weeks, perhaps months, down the line—and know exactly where you left-off.

Ending Diagnostics:

Check Inputs, Check tax organizer, Check “Do Not Scan” Pile, Calc

2-Year Comparison, Outputs, Record open items

1. Check virtual currency. Review basic info. General>Basic Data>1.
General>Line 43
2. Check previous preparer notes. General>Notes>2. Preparer Notes>Line 1
3. If interest or dividend income, check foreign bank account info.
Income>Interest>2. Foreign Acct>Line 1
4. If SCH C, check that required form 1099 have been filed. Income>SCH C>1.
General>Lines 25, 26
5. If SCH E (Non-S Corp/Partnership/Fiduciary), check that required form
1099 have been filed. Income>SCH E p1>1. General>Lines 23, 24.

Figure 36 A sample Ending Diagnostics Checklist that I personally use in my own work as a CPA tax accountant. If using specialized software, directory paths to various relevant parts of the software should be explicitly noted & highlighted, as shown above.

Erick Thomson 2023 Open Items

1. Need prior year return
2. Do we have bank recs for the LLC? If not, can we get bank statements from the client to confirm year-end cash balance?
3. Electronic filing diagnostic present relating to client social security number. Confirm SSN with client, and reach out to IT to get this resolved.

Figure 37 A sample Open Items List. Write out the open items as questions when appropriate.

G-100

This brings us to the conclusion of the Microsoft Word section. We are now ready to move on to our last, but by no means least, piece of major office software. Excel.

Section 6: The Excel Form Guide

G-101 How does one even begin to speak or write about Microsoft Excel? I suppose the first thing to say is that a great deal has already been said about this critical office productivity software: the software upon which practically the entire world financial system depends. This being the case, I will strive to emphasize only those aspects of Excel which I feel are unique to my own Materiality Efficiency Framework. Therefore, as we go through this, keep in mind that this brief guide is not meant to be, in any sense, a comprehensive overview of all of Excel, or its many features. In contrast, the outline herein embodies a rather laser-like focus on how this quasi-programming digital spreadsheet canvas can be utilized alongside the MEF.

G-102 Before we start this section, I would like to once-again encourage you to purchase a 10-key numpad, if you are doing quantitative work to any significant degree in Excel. Doing so will help you in a myriad of ways. For example, a little known trick in Excel is that the plus sign (+) can actually be used in place of the equals (=) sign to initiate formulas/operations. Since Materiality maps the Enter key to the middle mouse button (**M__MButton**), the Materiality “meta” (ideal strategy) with Excel in many cases is to have your right hand on the mouse and your left hand on the numpad, inputting most data with copy/paste, and seldom touching the right side of the keyboard as you go. With that bit of strategizing out of the way, let us dive right in to the ubiquitous, yet in my view, much underappreciated, software that is Microsoft Excel.

G-103 There is a single, extremely simple feature of Excel that, once you learn it, will save you a significant amount of time going forward. Have you ever had to copy/paste data from one Excel workbook or sheet to another? Typically, you would do this by either manually selecting the relevant data, or perhaps you would use **CTRL & A** for this purpose, and then copy with **CTRL+C**. There is, however, a better way. Simply mouse-over the bottom label tab of the Excel sheet you wish to copy, hold-down **CTRL**, and **drag with the left mouse button** in order to create an exact copy of the sheet. Furthermore, if you are working with two or more screens (and you should be), two different Excel workbooks can be placed on each screen. You can now drag the Excel sheet copy from one monitor to the other by dragging it without holding down **CTRL**. If you don't have two monitors available, you can double-tap **M__CapsLock** and **M__Alt** to place two workbooks side-by-side on a single screen. If only one workbook is open, you can create a new (blank) Excel workbook with **M__^+!MButton**.

BLS EXAMPLE DATA - Excel

A4

Table 2.11 Employment and output by industry (Employment in thousands of jobs; Output in billions of chained 2012 dollars)

Industry	Output, 2011	Output, 2021	Output, 2031
Total ⁽¹⁾⁽²⁾	28,475.0	34,893.3	42,696.0
Total ⁽¹⁾⁽²⁾	28,475.0	34,893.3	42,696.0
Nonagriculture wage and salary	28,026.2	34,324.7	42,004.9
Mining	559.5	703.4	873.6
Oil and gas extraction	326.9	569.5	754.9
Mining, except oil and gas	130.5	103.3	102.8
Coal mining	59.9	34.4	24.3
Metal ore mining	36.1	28.4	30.7
Nonmetallic mineral mining and quarrying	34.5	39.3	44.6
Support activities for mining	102.2	79.8	83.8
Utilities	465.2	512.1	541.5
Electric power generation, transmission and distribution	361.9	407.5	422.1
Natural gas distribution	89.6	92.2	106.9

Figure 38 A sheet copied (in green) by holding down **CTRL** and click-dragging the original (in red) with the left mouse button. An exact copy of the formatting and data is reproduced, which may be modified where needed on the new sheet. Also, to avoid confusion, the name of the copied sheet should probably be changed as well.

Book1 - Excel

Sheet1

2.11 TOTAL OUTPUT (2)

+

Table 2.11 Employment and output by industry (Employment in thousands of jobs; Output in billions of chained 2012 dollars)

Industry	Output, 2011	Output, 2021	Output, 2031
Total ⁽¹⁾⁽²⁾	28,475.0	34,893.3	42,696.0
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Nonagriculture wage and salary	28,026.2	34,324.7	42,004.9
Mining	559.5	703.4	873.6
Oil and gas extraction	326.9	569.5	754.9
Mining, except oil and gas	130.5	103.3	102.8
Coal mining	59.9	34.4	24.3
Metal ore mining	36.1	28.4	30.7
Nonmetallic mineral mining and quarrying	34.5	39.3	44.6
Support activities for mining	102.2	79.8	83.8
Utilities	465.2	512.1	541.5
Electric power generation, transmission and distribution	361.9	407.5	422.1
Natural gas distribution	89.6	92.2	106.9

Figure 39 The copied sheet created in the first instance has now been dragged with the left mouse-button (without holding down **CTRL**) to a new workbook. Cell references will carry-over. Be sure to remain vigilant, as to which set of data you are actually working with, and perform proper reconciliation when necessary.

Copying over data by CTRL left-dragging in this manner is generally a far superior method to any other when it comes to duplicating Excel sheets, as it preserves the exact, underlying structure/formatting of the sheet, and avoids many of the infuriating range-related errors that Excel likes to throw when duplicating datasets.

The MEF makes extensive use of VBA Macros, all of which are found on the Companion Excel Workbook. The general theory behind these custom macros is that they are not designed with any particular workflow in mind, but rather, represent extensions of Excel's native functionality, and so are useful across a broad range of end-user workflows. Each VBA macro does one thing, and it does it well. Such an approach is fully in-keeping with the MEF philosophy of automation, which seeks to supercharge the labor-efficiency of the end-user, as opposed to replacing him or her entirely. To activate these macros, a copy of the Companion Excel Workbook should be placed in your XLSTART folder, which will allow the Companion macros to run on any Excel sheet you happen to have open.

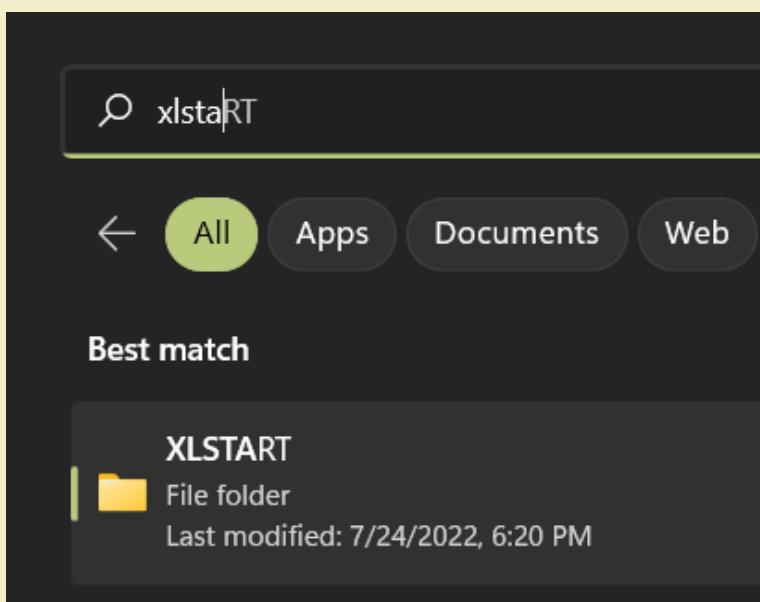


Figure 40 Getting to the XLSTART folder from your Windows Desktop.

Path: << AppData > Local > Packages > Microsoft.Office.Desktop_8wekyb3d8bbwe > LocalCache > Roaming > Microsoft > Excel > XLSTART			
Name	Date modified	Type	Size
Book	9/5/2021 11:54 AM	Microsoft Excel Te...	9 KB
Companion	1/15/2023 6:45 PM	Microsoft Excel W...	7 KB

Figure 41 The Companion Personal Macro Workbook placed inside the XLSTART folder.

Note that the Companion VBA macros are divided into two essential categories. Some macros are “pure” macros, in that they are called using only hotkeys defined in Excel. Other macros have both a default Excel keyboard shortcut assigned to them, and a corresponding Materiality hotkey, which overlays the Excel keyboard shortcut: it is generally preferable to use the Materiality hotkeys to call these dual-correct macros, as they were designed to be utilized as such. Some Materiality hotkeys also call elements defined in your Excel Quick Access Toolbar, and so you **must** have your Quick Access Toolbar configured in the following order:

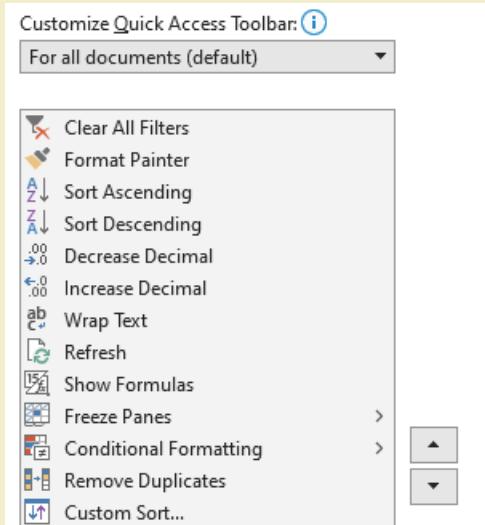


Figure 42 The order in which your Excel Quick Access Toolbar should be configured, so as to make full use of Materiality with Excel.

Overall, the Companion Excel macros are fairly simple and straightforward to understand, emphasizing themes of rapid navigation and mark-up/highlighting throughout the Excel sheet. For example, **M₁ Tab & MButton** will bring your view to cell A3 of the sheet. On the other hand, **M₁ Tab & Z** will bring you down to the last row in the spreadsheet that contains data. **M₁ Tab & RButton** and **M₁ Tab & LButton** can be used to cycle among different sheets in the same workbook. **M₁ ^+LButton** will create a new row/column, while **M₁ ^+RButton** will delete an existing row/column.

Other useful navigation hotkeys include **M₁ ^MButton** (enter data, stay in current cell), and **M₁ !LButton** (bring view to the currently-selected cell). Lastly, hitting **M₁ Tab & S** once will select down to the first empty row, while **M₁ Tab & S 2x** will call a macro that will select data to the last-filled row from the current cell—regardless of any gaps present among the intermediate rows. As you can see, there are a number of highly flexible options for navigating your Excel sheet. Feel free to experiment in order to find the hotkey combinations which best suite your needs.

Remember: hotkeys and macros can be leveraged together in combos, so as to achieve optimal speed & efficiency in your workflow.

There are two additional methods that can be used to track & navigate throughout the spreadsheet. First, you can add individual cells to the GoTo menu with **M_{_}+MButton** (this will also bring up the formatting menu for that cell, which you can exit by hitting ESC or **M_{_}CapsLock & Z**). You can now instantly fast-travel to the selected cell with the GoTo menu, which can be called with **CTRL & G**. Appending cells to the GoTo menu is an excellent way of saving particularly important cells that have been found with filter, while having the flexibility to turn filter off at the same time.

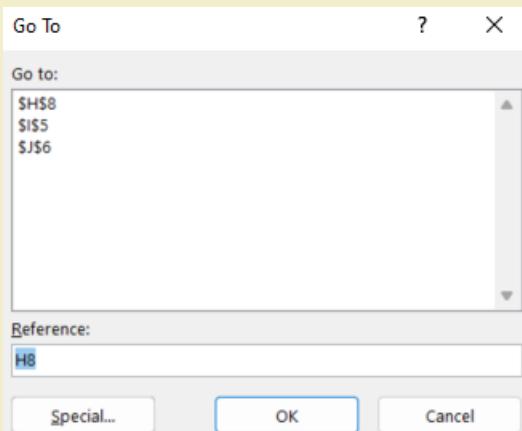


Figure 43 Cells added to the GoTo menu with M_{_}+MButton.

In a similar vein, you can use Watches for a more detailed and selective tracking of various cells. The Watch Window can be activated (and deactivated) with the native Excel shortcut **!MW**. I would also recommend moving this window to the left side of the workbook as shown below (so that the relative placing of Watches in Excel mirrors the relative placing of Bookmarks in Adobe). To append Watches to this pane, call the AddWatches macro with **M_{_}Tab & X**. This macro can be activated even if the Watch Window is not visible. Watches offer a dynamic overview of various critical cells throughout the workbook: such an overview can be particularly useful when dealing with convoluted Excel files that have many linked-cells across many sheets.

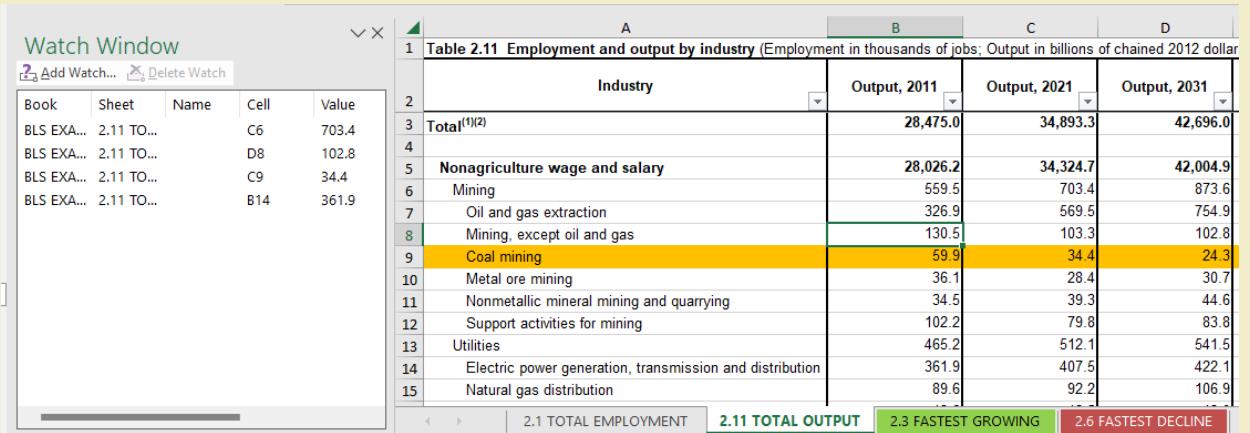


Figure 44 The Watch Window can be used to maintain a more detailed track record of various cells. Cells can be appended to this window with the Companion macro AddWatches, which may be triggered with M_Tab & X.

As for formatting, various highlights are available as pure macros under the **CTRL & SHIFT & A/B/W/E/D/R/T/V/C/Z** keys. Format painter is also present in the 2nd position from the left side on the Excel toolbar, and can be called with **M_CapsLock & F**. It is strongly advised to use format painter in order to copy/paste formatting to adjacent cells whenever possible. In addition to being able to alter individual cells one at a time, the format painter can also apply formatting across a range of cells to corresponding cells of an equally-sized range. The **M_CapsLock & S/D/F/G** keys allow you to quickly change the datatype of a cell or range of cells (Currency, Numerical, General, Percentage, and Date), while the **M_CapsLock & Q/W** keys, increase/decrease the number of decimal places shown for a certain range of numerical values. If you are working with quantitative data, you can quickly sum cells with **M_!+MButton**. Finally, the tab-color for an Excel sheet can be changed from that tab's right-click menu:

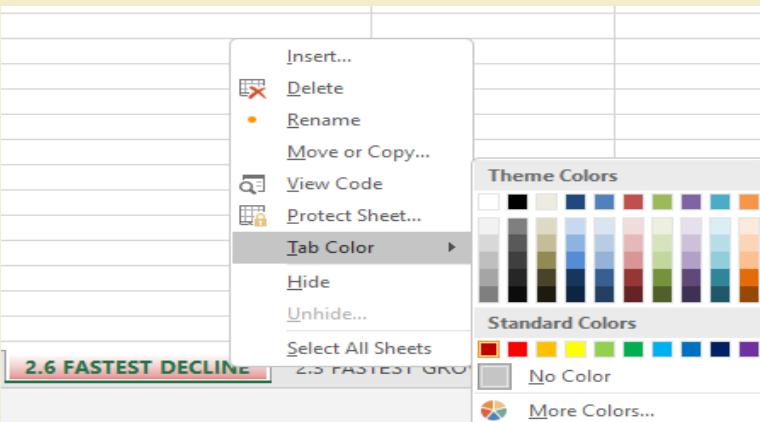


Figure 45 Changing the color of an Excel sheet's tab. This can be used to conceptually group together various sheets via highlighting, so that their purpose is obvious at a glance.

It should also be noted that by placing your cursor at the border of a cell and click-dragging that cell with the left mouse button, you can move data without altering its value, or relationship to other cells. Moving data in this way offers the ability to switch-out various cells where necessary (by holding down CTRL while doing this, you can actually copy the cell over to a different cell). Finally, another little-known trick is that it is possible to fill-down only the formatting of a cell: simply place your cursor at the bottom right-hand corner of a cell until it becomes a tiny cross, and drag-down with the *right mouse button* (not the *left mouse button*, as you normally would). You can now select various fill options, including the ability to extend down only formatting, or to extend down the underlying data-series without formatting.

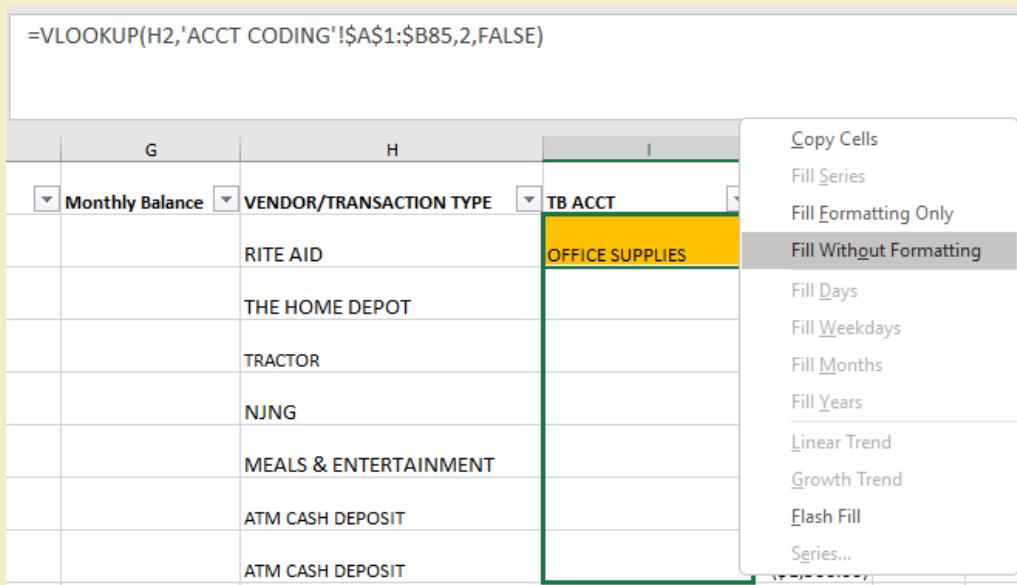


Figure 46 Placing your cursor at the bottom-right-hand corner of a cell, and dragging down with the right mouse-button will activate a "hidden" menu with various fill options, including the ability to fill-down without formatting. For example, in the above screenshot, the VLOOKUP formula would be extended down, but the orange color would not be, since "Fill Without Formatting" is selected.

Working alongside navigation and highlighting, filtering is also one of the most important features in Excel. The Create/Clear Filter hotkey occupies the 1st position on the Excel toolbar, and can be called with **M_CapsLock & X**. Note that if there are any empty gaps among the rows of the Excel sheet, the entire column must first be selected from the top to fully apply the filter. Otherwise, if no gaps exist, the filter can be applied from the uppermost cell in the column. For this reason, it is generally preferable to not have gaps present among rows of data in the first place, and instead, manually extend out the row-spacing of a cell, so as to create additional padding within the cell itself.

When using Excel, searching by filter should be your primary means of accessing specific data elements within the spreadsheet. Simply type the info you are looking for into the dialog search bar of the filter, check the data you need, uncheck the data you don't need, and then check the "add to selection" box, before hitting Ok. The filter search dialog can also be a powerful tool to get a decent overview of the unique elements that are present in a given column. It is also possible to filter by color, which enables you to color-code parts of the Excel sheet using the pure macro-highlights mentioned previously, and then to filter on those highlights. Furthermore, when data in a column changes, and you wish to reapply the filter, use the native Excel keyboard shortcut !AY1. Alternatively, click on the most recently-used filter, and check "Select All" to reapply the filter.

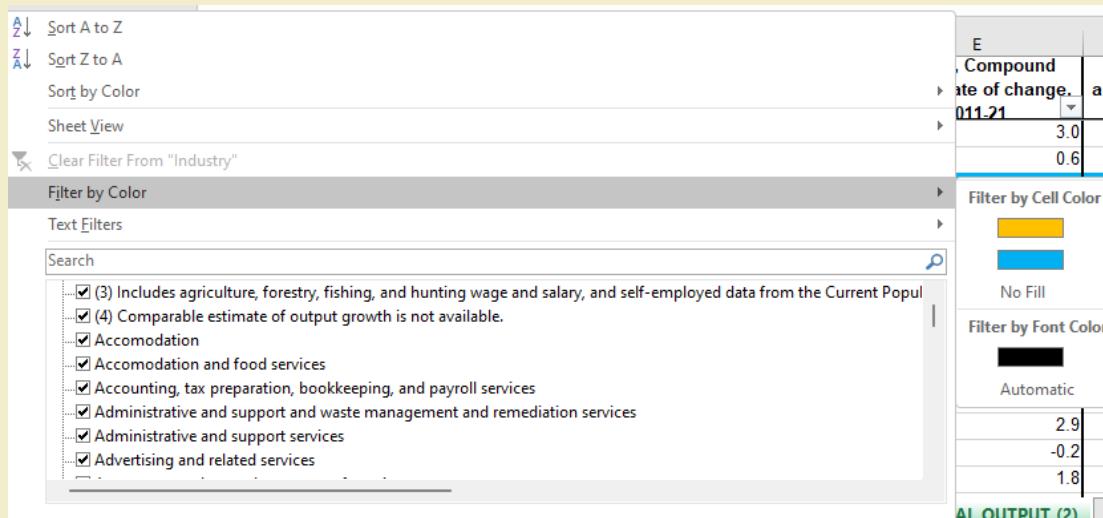


Figure 47 The filter dialog box can be utilized to provide an overarching view of the data in a column. Also, as shown above, color-coding cells with macro highlights becomes an especially powerful practice when combined with the ability to filter by color.

In addition to using Filter to include only a specific type of data meeting your search criteria, it is also possible to use Filter so as to *exclude* a particular type of data, as shown below:

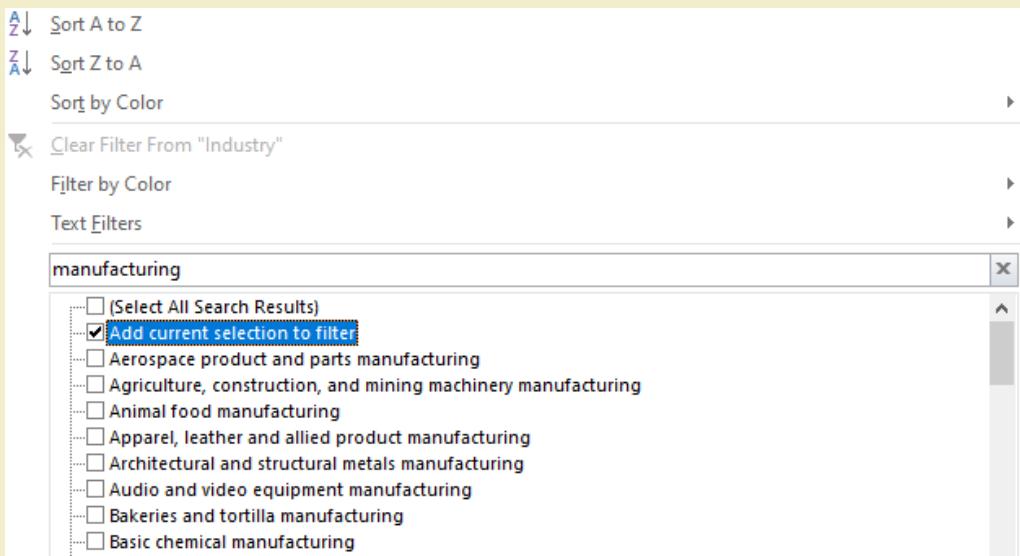


Figure 48 Using Filter so as to exclude all cells in which the term "manufacturing" appears. To exclude data in this fashion, type in your search query, deselect the "Select All" checkbox, and then select the "Add Current Selection" checkbox.

Similar but distinct to filtering by color, sorting by color is also an important skill to master in Excel. To do this, click the Sort icon under **Data>Sort & Filter**, and then select the order upon which you would like to sort (you can add an additional level to the sort-stack by clicking add level). One advantage of sorting by color in this way is that you can quickly switch elements from one category to another by simply altering the color of the cells in the sheet, and re-running Sort on the entire array of data. Be careful not to confuse filter by color with sort by color, as they are not the same thing.

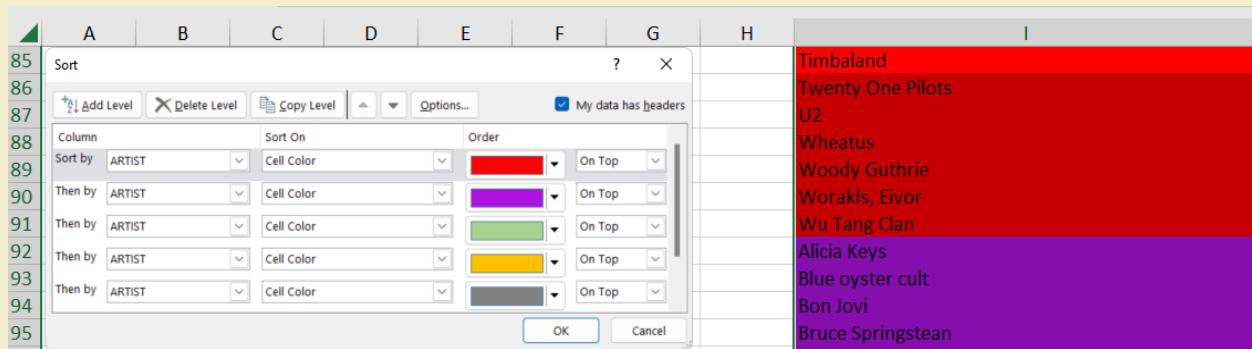


Figure 49 A list of music artists sorted by color in an Excel sheet.

Note that sorting carries an inherently greater danger of disrupting your well-organized Excel sheet than filtering does, since cell values can become misaligned. As a result, there may not be any way to "return" to the original order of items in the column before Sort was applied (CTRL+Z seems to work in reversing sort only to a limited extent). In order to have some means of recovering the original state, it is best to create an index

for each row of the Excel sheet. The most optimal way of accomplishing this is to write out the numbers 1, 2, 3 in cells A1, A2, A3, and then place your cursor at the bottom-right-hand corner of cell A3 until it becomes a tiny cross. At this point, fill down to the last row in the sheet with the *right mouse button* (not the *left mouse button*, as you normally would). Doing this gives you a number of options, including “fill series”, which should fill-in the remainder of the index.

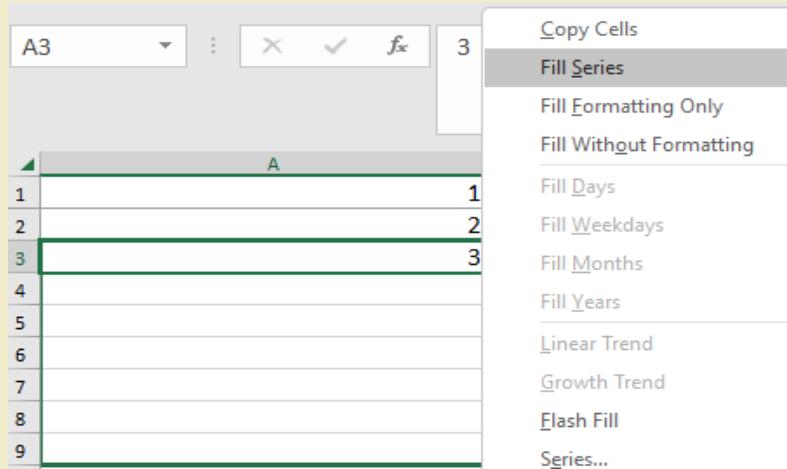


Figure 50 In a similar vein to the sans-formatting option we saw previously, fill series is the easiest means by which to create a numerical index in Excel. If the cells are ever sorted out of their original order, this index can then be used to return to the original state before sort was applied.

In addition to slicing & dicing data by filtering and sorting, it is also valuable to be aware of the unique quirks and features of Excel’s general CTRL+F search functionality. In Excel’s CTRL+F search dialog, there is a difference between searching on formulas, searching on values, and searching on comments. Searching on formulas will return any value that is the output of a function (such as =SUM()), and any standalone value (such as the number “4” written as a single value inside of a cell). However, searching on formulas will *not* return any cell values that are the product of a rudimentary mathematical operation (addition, subtraction, multiplication, division etc...). In order to return all cells that contain a certain value, be sure to select “Look in: Values” in the CTRL+F dialog box. You can also select to search by comments from this menu as well.

		2		
		2		
4	=2+2	=SUM(J3:J4)	4	

Figure 51 Four different ways to write the number 4 in Excel. From the left 1). The number 4 hardcoded as a standalone value 2.) The number 4 as an output of a rudimentary mathematical operation 3). The number 4 as an output of a function with other cells serving as inputs 4). The number 4 as a comment of the cell, but not written within the cell itself. Depending on Excel's CTRL+F search dialog settings, your results will vary.

Also, to keep Excel's search algorithm from chaotically jumping around the sheet, you should use the "Find All" search option instead of "Find Next". This will return a list of all values found for that search query. You can then click on each value in order to travel to its specific location. Furthermore, if your goal is to search the entire workbook, select "workbook" in the Within menu of the search dialog box. Finally, remember that wildcard characters are valid in an Excel search query. As in the File Explorer, the star (*) RegEx character is by far the most useful, as it stands-in for multiple uncertain values. For example, below, I have constructed what I believe to be the optimal, maximalist search query for the number "4" within the entire Excel workbook. Notice how Find All is leveraged to make sure that we get all of the search results in the workbook.

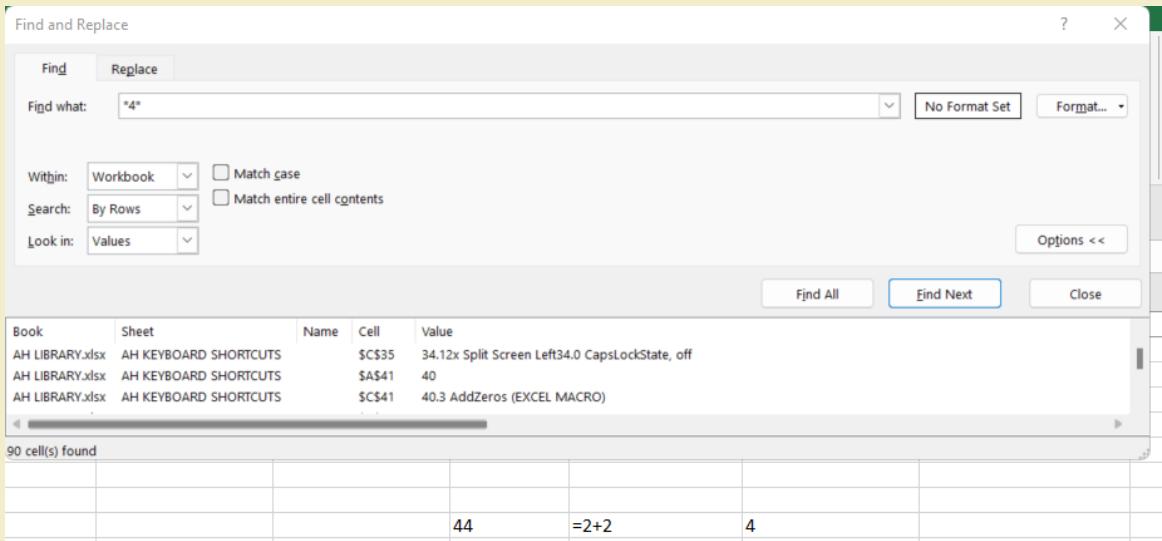


Figure 52 An example of a maximalist search query in Excel that runs through the entire workbook, and finds every instance.

G-120

Continuing on our broader discussion of Excel, a critical practice which can make or break any highly complex Excel workbook is the linking of various cells in a relational chain. By its very nature, this is an extremely sharp double-edged sword. On the one hand, linking cells correctly can save you a great deal of time, and can be utilized to create Excel templates for repetitive workflows. On the other hand, linking introduces potential single-points-of-failure into the Excel workbook, which can result in the infamous (and infuriating) #REF! error.

G-121

My general rule of thumb when linking cells is this: keep permanent links as clear & concise as possible, and keep calculation links temporary. Permanent links are those links that you wish to be present in the Excel sheet when the product/deliverable has been fully completed. This can be as simple as a subtotal amount being updated based on data in the adjacent column, or as complex as a separate summary sheet being dynamically altered based on other parts of the workbook, or even an outside data source. Either way, permanent links form an integral part of the end-product created by the Excel file and workbook in question.

G-122

On the other hand, calculation links are those cell links that *do not* need to be present in the final workbook end-product, but are simply temporary relations used to speed-up the workflow itself. For example, an optimal method for transcribing a list of dates into Excel (if copy/paste is not available) is to write the day of each date, then use the DATE() function in an adjacent column to fill-in the month/year for each day. We have no need of this calc link in the long-run, as we simply want the date, which we can paste as values in the original column using **CTRL & ALT & V**. Pasting as values will thereby break the calc link, which is no longer needed.

G-123

Striking the appropriate balance when linking cells is more of an art than a science, and the proper digital sense for doing so can only ever develop with time and experience. A good general principle to follow is that if you get an ominous feeling that a particular cell link will—in the future—break the entire workbook in a ruinous cascade of #REF! errors, it probably will, and you are generally better-off treating it as a temporary calc link that will eventually be pasted as values instead.*

*As they are essentially a programming language without custom-named variables, Excel's functions (at least in their default configuration) should not be relied upon to create extremely sophisticated and convoluted software logic. Instead, Excel should be viewed primarily as a digital spreadsheet canvas for rapidly navigating, slicing, filtering, highlighting, and otherwise marking-up relevant data in a manner that will be fundamentally intuitive for others to see and understand.

=DATE(2020,1,E7)

D	E	F
	1	1/1/2020
	2	1/2/2020
	3	1/3/2020
	4	1/4/2020
	5	
	6	=DATE(2020,1,E7)
	7	
	8	
	9	
	10	

Figure 53 Using the DATE() function to generate a set of full dates in Column F, after having only inserted the day of each date in Column E.

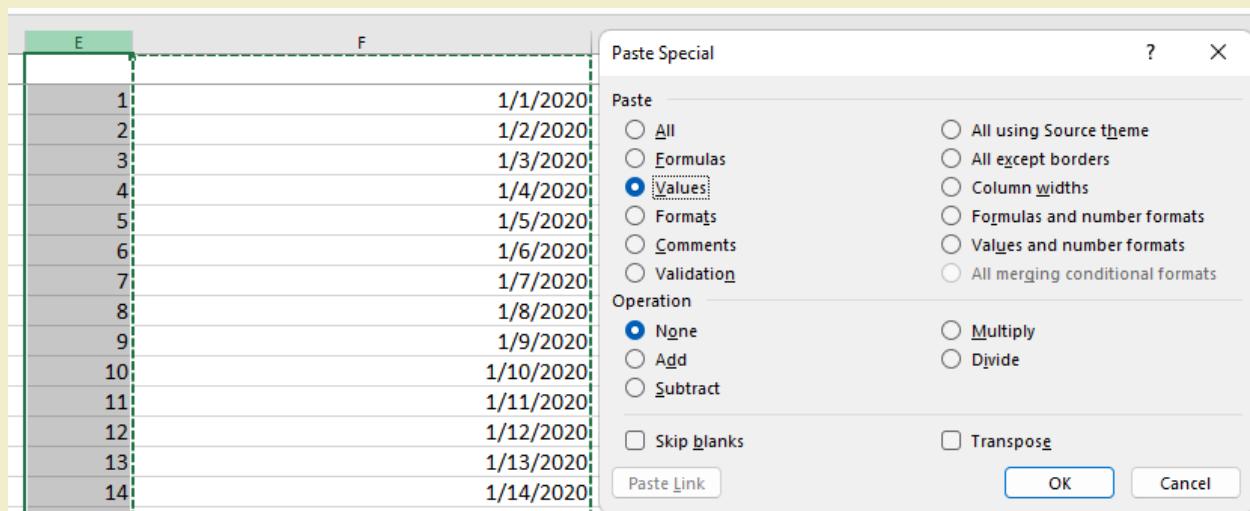


Figure 54 Pasting the dates as values in order to replace the original column. The temporary calc link present in Column F that was previously created through the DATE() function has served its purpose, and can now be safely discarded.

While the MEF seeks to advance the optimal use of each of the primary apps that place its core theory into practice, it also endeavors to enable data interchange from one desktop app to another. Indeed, the ability to seamlessly transfigure data between Word, PDF, and Excel workpapers is a key skill to master in order to save the most amount of time. In the vast majority of cases, this is as simple as hitting CTRL+C/CTRL+V to copy/paste the data in question. However, this copy/paste method becomes far more onerous when the data itself tends to be unstructured (such as in the case of a handwritten note).

G-125

So, how do we automate the entering of highly-unstructured data? We do not. Instead, we swallow our pride, put on some proper, life-inspiring music (I like [Miracle of Sound](#)) and reconcile ourselves to a mind-numbing evening of menial data-entry, while we ponder the existential meaning of our existence, which is, in fact, to [pass butter](#).* Just remember to use Separation of Concerns (i.e. enter one datatype at a time, not one unique element at a time: one column at a time, not one row at a time) when performing this sort of tedious transcription.

G-126

What about cases of semi-structured data, in which the OCR translation of the underlying characters is not perfect, but not all hope is lost, as far as being able to copy/paste significant chunks of the data? In that case, you should create an Excel sheet separate from your main wp to copy/paste the data into. After the information has been copied in an imperfect form, transform the data as you need to (by adding/deleting columns/rows etc...), and reconcile the resulting output to your main Excel workbook.**

G-127

Furthermore, If there is a structured data table inside a PDF file that you would like to copy directly, select the table with your mouse-cursor, right-click, and choose "Copy With Formatting" to do so. In my experience, using Copy With Formatting gives you a data table in Excel as good as any you would obtain from PowerQuery, or any of the other more "advanced" Extract, Transform & Load (ETL) solutions. In fact, since you can manually guide the scope of the data range to be copied over, the results are often preferable—as you can go on a line-by-line/page-by-page basis, and sensibly exclude those areas of the data table that you know likely won't be legible by the software.

*This is why wp should be scanned-in at 600 dpi or higher. Also, would it positively *shock* you to find out that I, of all people, like Rick & Morty? It's a dumb show, but it speaks to the Spirit of an Age. The Age of the Sky King.

**Excel may not be the "best" data-analysis tool, but it is the most convenient and easily-accessible in practice. Excel may not be the "best" data-visualization tool, but it is the most convenient and easily-accessible in practice. This versatility gives Excel its essential value-add, and explains why nothing else has quite replaced it in these many decades. The goal is to do productive work with speed & efficiency, and (when used correctly) Excel more than suffices for this purpose in the vast majority of office use-cases. Every other product feature is secondary, if relevant at all.

	2022	2023	2024	2025	2026	Thereafter	Total	Estimated Fair Value
Money market funds	\$ 20,312	\$ —	\$ —	\$ —	\$ —	\$ —	\$20,312	\$ 67,981
Weighted average interest rate	(0.02)%	— %	— %	— %	— %	— %	(0.02)%	
Corporate debt securities	18,063	6,253	8,231	2,044	921	—	35,512	
Weighted average interest rate	0.34 %	1.02 %	1.02 %	1.35 %	1.22 %	— %	0.70 %	
U.S. government and agency securities	1,584	837	561	672	558	61	4,273	
Weighted average interest rate	0.30 %	0.39 %	1.00 %	1.14 %	0.99 %	1.01 %	0.65 %	
Asset-backed securities	1,237	1,966	1,722	959	312	500	6,696	
Weighted average interest rate	1.19 %	0.93 %	1.28 %	1.27 %	0.99 %	1.14 %	1.14 %	
Foreign government and agency securities	105	52	22	—	—	—	179	
Weighted average interest rate	0.97 %	1.12 %	0.74 %	— %	— %	— %	0.98 %	
Other fixed income securities	142	264	222	57	—	—	685	
Weighted average interest rate	0.65 %	0.93 %	0.68 %	1.35 %	— %	— %	0.83 %	
Cash equivalents and marketable fixed income securities	\$ 41,443	\$ 9,372	\$ 10,758	\$ 3,732	\$ 1,791	\$ 561	\$ 67,657	
								\$ 67,981

Figure 55 Using Copy With Formatting to copy over a data table from a PDF file. Inside the PDF, select from the bottom right-hand corner of the table, and try to avoid any parts that are likely unreadable if you can.

	2022	2023	2024	2025	2026	Thereafter	Total	Estimated Fair Value as of December 31, 2021
Money market funds	\$ 20,312	\$ —	\$ —	\$ —	\$ —	\$ —	\$20,312	\$ 20,312
Weighted average interest rate	(0.02)%	— %	— %	— %	— %	— %	(0.02)%	
Corporate debt securities	18,063	6,253	8,231	2,044	921	—	35,512	35,764
Weighted average interest rate	0.34 %	1.02 %	1.02 %	1.35 %	1.22 %	— %	0.70 %	
U.S. government and agency securities	1,584	837	561	672	558	61	4,273	4,300
Weighted average interest rate	0.30 %	0.39 %	1.00 %	1.14 %	0.99 %	1.01 %	0.65 %	

Figure 56 The same table, now pasted into an Excel sheet. Definitely a good amount of work still remains to be done to clean all this up, but it's better than manually transcribing the data from scratch. Make sure that all totals and sub-totals are calculated with the SUM() function. Also, check that numbers are recognized as actually being of the numerical datatype by Excel.

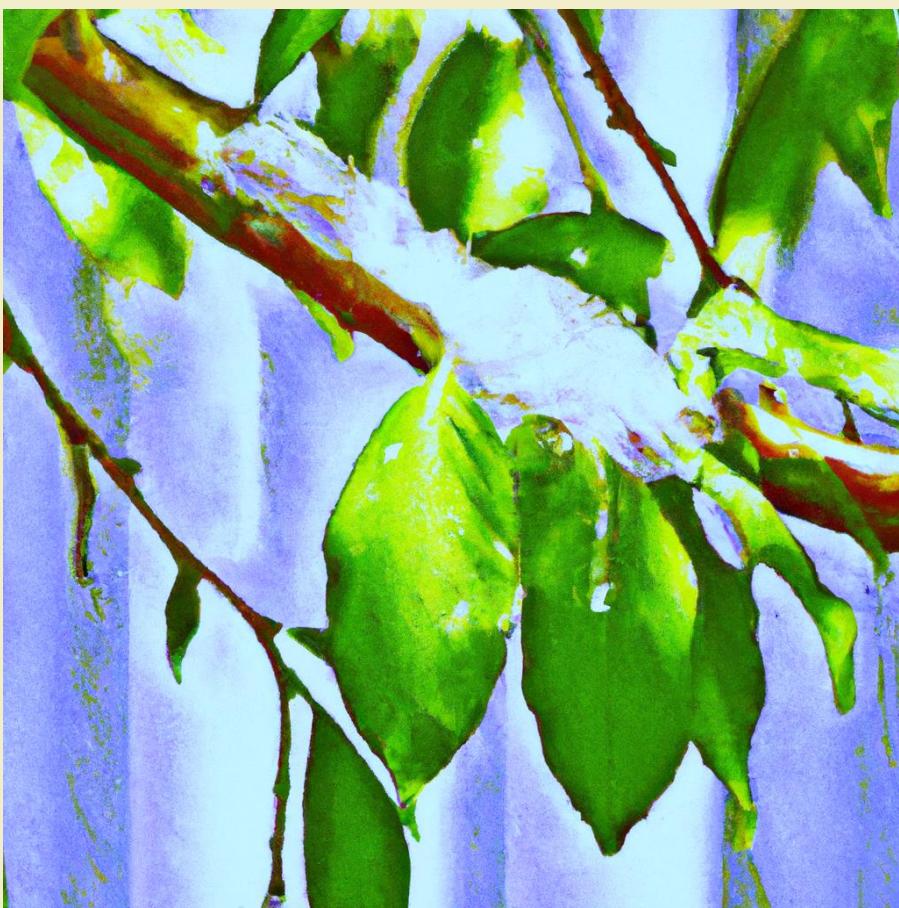
A core issue with importing semi-structured/highly imperfect data into Excel is that the data itself may be legible to the software, but the spacing/formatting is often completely off. The most straightforward way to resolve this issue is to use Text to Columns, which can be activated with the native Excel shortcut **!AE**. With this tool, you essentially have two options. First, you can split-off the data based on some constituent

element within the text, which is known as a delimiter. For example, you can split-off all dollar amounts by using the \$ delimiter. You can also use a comma as a delimiter, an empty space, or any other consistently-occurring character in the data. The second option is to use an arbitrary fixed axis to split-off the data: this gives you much greater control over where the split-off occurs, and typically produces far fewer output columns than using a delimiter, but at the cost that the data may not be split-off consistently. Generally speaking, fixed width should only be used to split-off data if the width of the data is more-or-less uniform across all rows.

VLOOKUP, XLOOKUP, Pivot Tables etc...

I am not going to show you this. I am not going to show you this, because the first page of Google (or YouTube) is a far better and more concise teacher on these matters than I could ever be. Go learn [VLOOKUP](#). Go learn [XLOOKUP](#). Go learn [Pivot Tables](#). Take a few minutes out of your busy day to watch & understand these edifying features, which will allow you to save hundreds, potentially thousands, of hours of your precious time in the long-run. If you are working with Excel on a daily basis, and you don't already know VLOOKUP, XLOOKUP, and Pivot Tables, I am guessing you almost certainly know that you *should* know these things—even if you haven't (yet) taken the opportunity to master them. Trust me on this: learning a few common Excel features now will probably grant you a far higher ROI than any move you might be thinking of making in the stock market, or the real-estate market, or the crypto market etc....So go do it. Make the investment in your own skills and your own professional competence. The videos I have linked above, taken together, are less than 10 minutes in total view time.

We conclude this section on Microsoft Excel by noting its centrality to our workflow. Before our discussion of Excel, we had examined two apps—Adobe Acrobat Pro & MS Word—whose features were largely static and independent of each other. In this regard, Excel is truly in a league of its own—as it is essentially the Swiss Army Knife of small-to-medium-sized data analysis. If ever a problem seems too confusing or complicated to solve on its own, one of the first things you should consider doing is opening up an Excel sheet, and analytically outlining the dimensions of the problem. Perhaps, you will use this Excel sheet to solve the problem, and then delete it—as you have no more need of it. Or, perhaps, you will save the resulting Excel workbook as one of your workpapers for the project. In the worst case scenario, the problem has not yet been resolved, but you at least have a rough outline of what the dimensions of the problem are, and what you've done to figure them out. The bottom line is that the use of Microsoft Excel should not seem fraught, difficult, or scary to you, but rather calm and serene in practice: as snow melting away on a refreshing, early spring day.



Serenity

Section 7: Conclusion & Neo-Taylorist Renaissance

To exist as a rational human being is to enter into a conversation. The process of learning is merely the act of getting caught-up on what others have already said, so that you may speak without making a fool of yourself. It is as true in American Literature as Software Development. As true in Art, Philosophy, and Politics, as it is in Accounting, Science, and Engineering. There are no true barriers to these things. No hard boundaries or limits. Arbitrary divisions born of practicality, yes, but all part of a single human experience—a genuinely greater journey. With that in mind, I would now like to invite you to enter into the conversation that I have only continued here, as I fully admit to having stood on the shoulders of giants. In truth, there is not one Materiality Efficiency Framework, but many.

Over the past several generations, we have seen what happens to a society when the brightest minds of that society lust primarily for social media stardom, collateralized derivative trading, and min-maxing their game character builds. I fear that a great deal has not been built that should have been built in the meantime. Just how many engineers have we lost? Oh, but we must learn to dream again, to have eyes with which to see the inherent connections among the disparate things, and to celebrate with existential pride the marvels of modernity that we leave behind—both for our own eternal glory, and as the legacy inheritance of future historical epochs. But now is not the time to celebrate. Now, We Must Build.

If you would like to support my work, please consider [subscribing](#) to the app instead of just pirating it. Thank you. I would really appreciate it.

PART II

**Materiality Modular
Technical**

This next part contains miscellaneous technical & philosophical items relating to the MEF, which are grouped by their associated primary app, as well as a more General sub-section at the End.

This potpourri of tips & tricks is presented in no particular order.

ADOBE—MISC

G-133

ÀII

In most apps, you can redo a CTRL+Z undo with CTRL+Y. In Adobe, the equivalent of this redo action is CTRL & SHIFT & Z.

G-134

ÀII

If you are going to copy/paste an image into Adobe, first copy the image into a Word document. This will help control the size of the image when it is pasted into the PDF.

G-135

ÀII

You don't have to manually drag with the cursor to select a discrete value. To select/highlight a number or string of text inside a PDF file, double-click on that number or string of text with the left mouse-button.

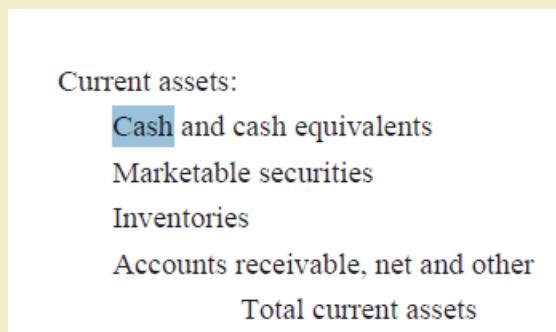


Figure 57 Selecting the word "Cash" by double-clicking on it with the left mouse button. Numbers can be selected in a similar fashion.

G-136

ÀII

When highlighting a PDF page (or an Excel sheet for that matter), use color sparingly & deliberately. If using multiple color schemes, make sure each color represents a meaningfully distinct category.

For example, you might choose a purple highlight for values of ordinary importance, and an orange highlight for values of critical importance. Remember that the effectiveness of a technique is diluted through its overuse.

AMAZON.COM, INC. CONSOLIDATED BALANCE SHEETS (in millions, except per share data)			
	December 31,		
	2020	2021	
<u>ASSETS</u>			
Current assets:			
Cash and cash equivalents	\$ 42,122	\$ 36,220	
Marketable securities	42,274	59,829	
Inventories	23,795	32,640	
Accounts receivable, net and other	24,542	32,891	
Total current assets	132,733	161,580	
Property and equipment, net	113,114	160,281	
Operating leases	37,553	56,082	
Goodwill	15,017	15,371	
Other assets	22,778	27,235	
Total assets	\$ 321,195	\$ 420,549	

Figure 58 Here, we see Adobe highlights as applied to the 2021 year-end balance sheet of Amazon. As cash is generally the most liquid current asset that must be tied-out to the penny, it is given the first-priority color of orange. The other important line-items are given the normal-priority color of purple, with light-blue serving to indicate sub-totals.

Digital Video and Music Content

We obtain video content, inclusive of episodic television and movies, and music content for customers through licensing agreements that have a wide range of licensing provisions including both fixed and variable payment schedules. When the license fee for a specific video or music title is determinable or reasonably estimable and the content is available to us, we recognize an asset and a corresponding liability for the amounts owed. We reduce the liability as payments are made and we amortize the asset to "Cost of sales" on an accelerated basis, based on estimated usage or viewing patterns, or on a straight-line basis. If the licensing fee is not determinable or reasonably estimable, no asset or liability is recorded and licensing costs are expensed as incurred. We also develop original video content for which the production costs are capitalized and amortized to "Cost of sales" predominantly on an accelerated basis that follows the viewing patterns associated with the content. The weighted average remaining life of our capitalized video content is 2.6 years.

Our produced and licensed video content is primarily monetized together as a unit, referred to as a film group, in each major geography where we offer Amazon Prime memberships. These film groups are evaluated for impairment whenever an event occurs or circumstances change indicating the fair value is less than the carrying value. The total capitalized costs of video, which is primarily released content, and music as of December 31, 2020 and 2021 were \$6.8 billion and \$10.7 billion.

Figure 59 Multi-priority Adobe highlights as applied to text. Here, we wish to indicate that the paragraph on top has normal-priority importance by highlighting it with the normal (i.e. purple) color. However, within this paragraph, the sentence relating to the capitalization of license fees is given critical importance, and highlighted with the first-priority (i.e. orange) color.

All

You can use the CTRL+F Search functionality to quickly find variances between two different values. For example, let us say I have a December year-end bank statement with a final balance of \$1,001. However, the balance sheet sent over from the client indicates a final, year-end balance of \$995.34. Since cash accounts generally have to be reconciled precisely, I must now spend time looking over the entire bank statement to find the \$5.74 difference...or I can just pop the \$5.74 into the CTRL+F search bar, and find the variance in a few seconds! Scale this problem up across a large set of documents spanning hundreds—potentially thousands—of PDF pages, and you can see the benefit of consolidating your workpapers into as few files as possible, and using CTRL+F to search for any values you may need to find.

All

If manually creating form fields in Adobe, use only the Text and Checkbox form input types: all other datatypes (dates, radio buttons etc...) can be broadly represented by these. Also, stay away from creating tiny form fields, as they are extremely hard to move and manage. Instead of drawing multiple small form fields, draw a single large Text field, and manually use the spacebar key to simulate appropriate distances among the input characters. To move a form field, click and drag in the middle of the field while in “Prepare Form” mode on the Tools pane. Also, remember that you can auto-detect form fields, and adjust the font of a field in its right-click Properties menu.

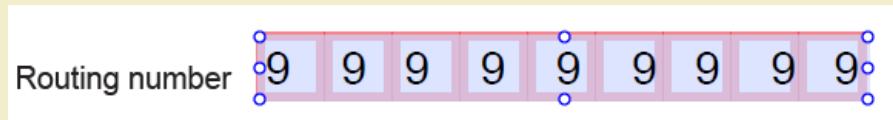


Figure 60 In Adobe PDF, it is often both easier & quicker to manually create/adjust large form fields, as opposed to small ones. Individual boxes on the physical form can still be simulated inside the larger form box by manually adjusting the spacing of characters.

All

PDF bookmarks are extremely useful when your workpapers/documents are out of order, and you don't want to go to the trouble of putting them back in order. Instead, you can use bookmarks to place the contents of the pages in the correct conceptual order, even if the pages themselves never change place. Using this simple technique saves you a

substantial amount of time, as creating and shifting bookmarks is much simpler & faster than re-ordering the entire PDF.

AMAZON.COM INC. CONSOLIDATED BALANCE SHEETS (in millions, except per share data)		
December 31,		
	2020	2021
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 42,122	\$ 36,220
Marketable securities	42,274	59,829
Inventories	23,795	32,640
Accounts receivable, net and other	24,542	32,891
Total current assets	<u>132,733</u>	<u>161,580</u>
Property and equipment, net	113,114	160,281
Operating leases	37,553	56,082
Goodwill	15,017	15,371
Other assets	22,778	27,235
Total assets	<u>\$ 321,195</u>	<u>\$ 420,549</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 72,539	\$ 78,664
Accrued expenses and other	44,138	51,775
Unearned revenue	9,708	11,827
Total current liabilities	<u>126,385</u>	<u>142,266</u>
Long-term lease liabilities	52,573	67,651
Long-term debt	31,816	48,744
Other long-term liabilities	17,017	23,643
Commitments and contingencies (Note 7)		

Figure 61 Bookmark order need not follow page-number order. For example, in the annual report above, the income statement comes two pages before the balance sheet in actual page-number order, but is represented as conceptually following after the balance sheet on the bookmarks. This is because net income is ultimately a sub component of the balance sheet, and since the balance sheet is also a summary sheet, in terms of proper organization, it should go first.

All

If, after having appended pages to the file, you are receiving a range-related error when saving the PDF, delete the accessibility tags. Otherwise, you should leave the accessibility tags in place, as they are there to help people.

You can delete the accessibility tags by going into **View>Show/Hide>Navigation Panes>Accessibility Tags**.

AII

If Adobe's OCR detects readable text on a page, it will throw an error that will stop the whole OCR process from continuing until the error has been resolved. In order to work around this somewhat annoying issue, add OCR as an action from the Action Wizard (under the Tools pane), and run the OCR Action, instead of the standard Recognize Text command. Doing so will ensure that no readable text error is thrown during the process.

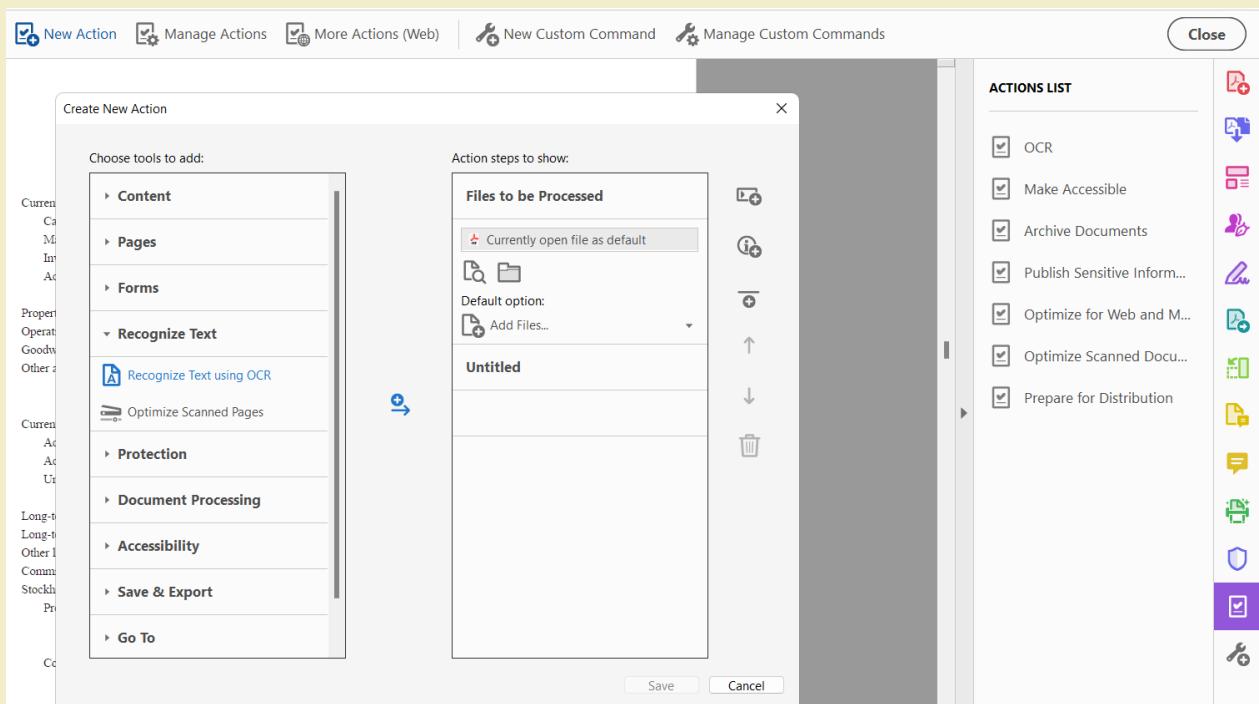


Figure 62 Using the Action Wizard to add OCR as a standalone action that won't throw an error, even if readable text is detected on the page. The action wizard can be found at the bottom right-hand corner of the Tools pane. The new action can then be added to Adobe's Quick Access Toolbar like any other feature—by using the right-click menu of Quick Access.

AII

A common issue you may encounter with a PDF file is that it is password-protected. These pesky security settings make it impossible to consolidate the file with other PDFs, or even to edit/highlight the document. If possible, you should attempt to remove these security measures by using the appropriate password. However, often this does not work for whatever reason.

The good news is that it is still possible to print the document with "Microsoft PDF" selected as the printer. This will allow you to save a non-password protected version of the file, which you can then edit, mark-up, and combine to your heart's content.

All

You may often find yourself needing to change the physical order of pages in a consolidated PDF file, which can be somewhat cumbersome in Adobe. To do this, select the first page in the range you wish to move, hold down **CTRL & SHIFT**, and select the last page in the range you wish to move. Now that the pages have been selected, position them in the margin between the scrollbar and the page thumbnail, and bring them down like so:

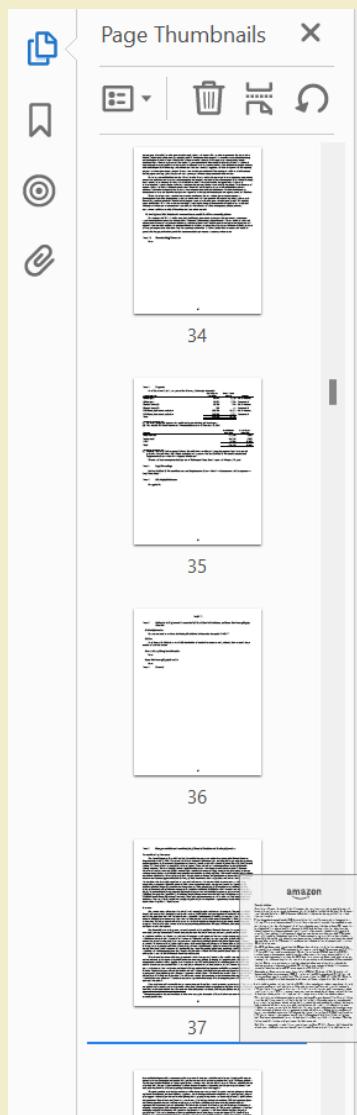


Figure 63 Changing the physical order of pages inside a PDF file.

All

It is possible to re-use a set of bookmarks you have already created in one PDF file in another PDF file: simply save the original PDF that has the bookmarks you wish to use as a new version, create a blank page at the start with **CTRL & SHIFT & T**, and delete all other pages in the file. You now have a blank PDF canvas containing the original bookmarks, to which you may append the PDF documents you actually want to work on. Once the new wp are inserted, right-click on each bookmark and hit the “**A**” key on your keyboard to set the bookmark location.

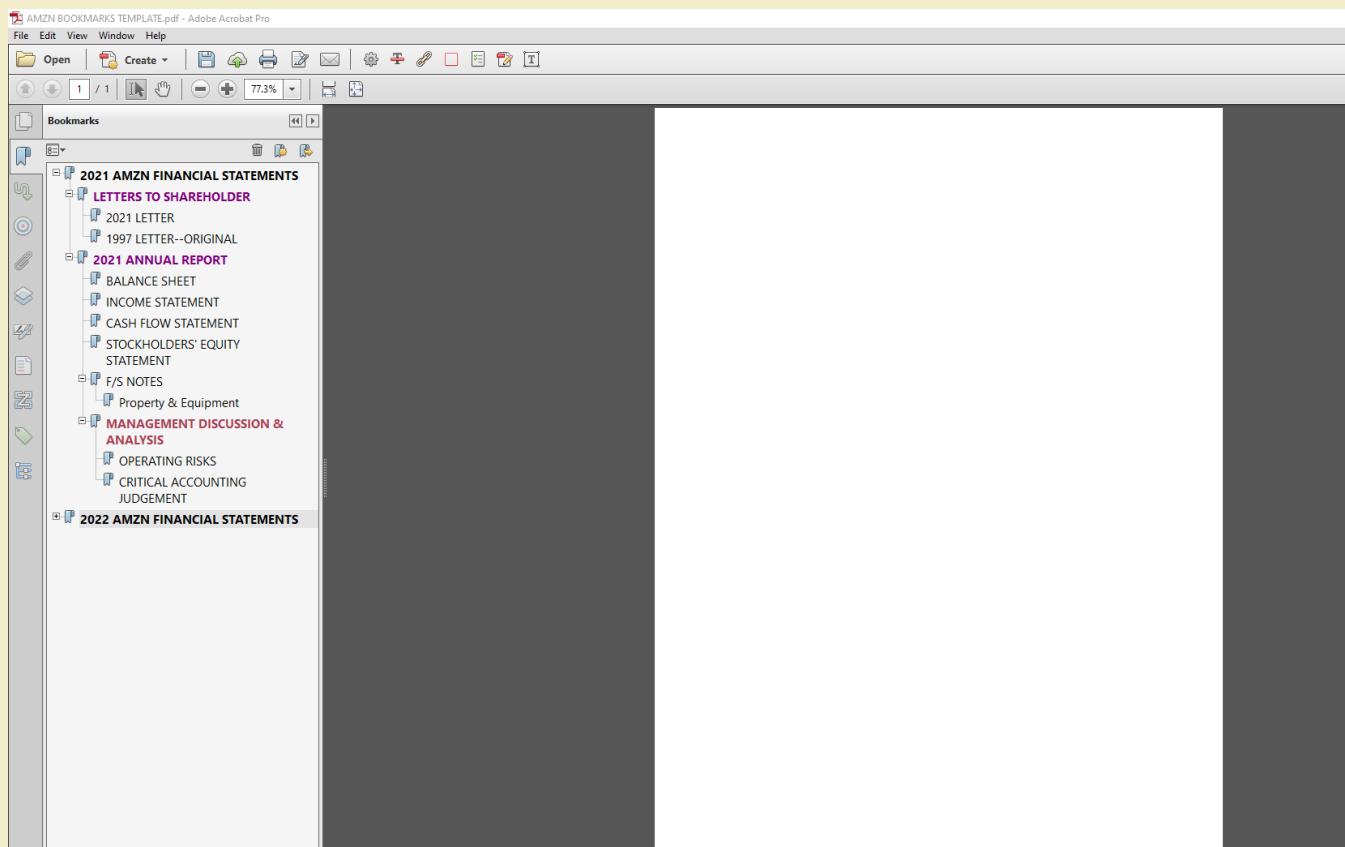


Figure 64 A template for Adobe bookmarks with a single blank page used as a placeholder. Once the new documents are inserted into the file, the bookmarks can then be reassigned to match the new wp.

All

For the students out there: PDF files are generally a far superior storage medium for your text/study materials, as compared to whatever mediocre planner or organizer your school gives you. For example, if you have to read through online course modules, copy & paste the text of all the modules into a Word document, and then convert the Word document into a single, comprehensive PDF file. You can now highlight/comment/bookmark the PDF file at will, per the MEF.

Also, if you have modular practice questions to do after each section, remember that the results of the practice questions can also be printed to PDF, and you can then bookmark all of the practice questions you got wrong. In regard to the main study text, you can highlight the bookmarks of important topics as well. Once that's done, you can go over both the practice questions PDF, and the main study guide PDF, before the test.

This strategy of studying is, in my view, far superior to taking physical notes, as it provides you with unparalleled digital precision & speed, while avoiding the frustratingly slow/buggy nature of most e-learning sites. This is also how I passed the CPA exam.

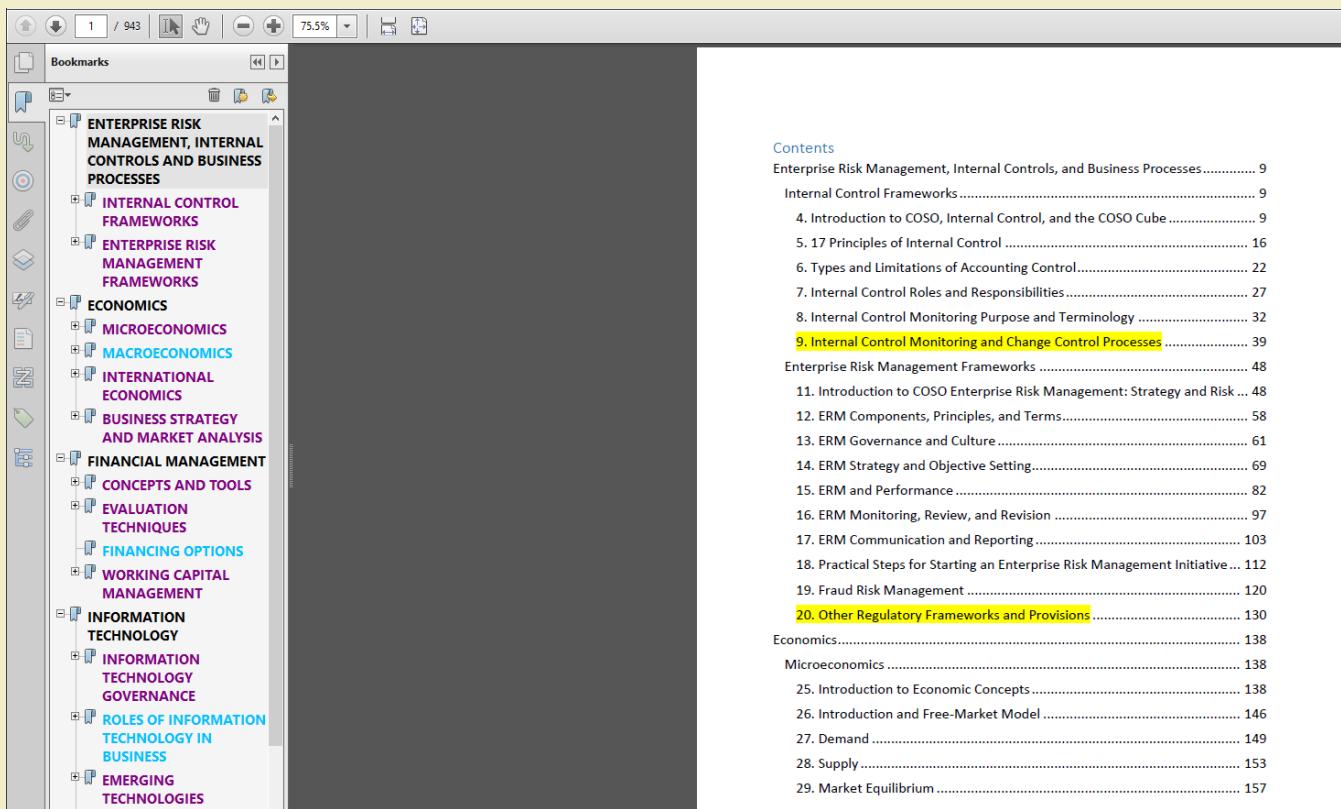


Figure 65 My consolidated CPA exam notes for the BEC section of the exam. First, I copied over my Wiley modules into a Word document, created headings for each module, and placed the headings into a Table of Contents at the top (In Word, References>Table of Contents). I then made sure that the spacing was good (i.e. every module starts on its own page), and converted the resulting document to a PDF file.

Above, the structure of the bookmarks in the PDF mirrors the structure of the modules themselves, and the important/critical bookmarks are highlighted in blue, so that they stand-out and are easy to identify. The yellow highlights on the Table of Contents indicate the last module before a set of practice questions, which I would typically do after I finished highlighting/outlining that particular section of the PDF.

The screenshot shows a PDF document with a table of contents on the left and a main content area on the right. The table of contents includes sections like '14 Adaptive Review' (14.1 through 14.8), '19. Adaptive Review' (19.1 through 19.4), and '36. Adaptive Review' (36.1 through 36.16). The main content area displays a question from '14 Adaptive Review' about Zeta Co.'s sales revenue and accounts receivable. It includes a table of financial data, a list of four multiple-choice options, and three detailed rationales with calculations.

Figure 66 Similarly, whenever I would complete a set of practice questions, I would print the results to PDF, and bookmark only those questions that I had gotten wrong. After I had outlined all of the review questions in this way, I would bring together all of the practice sets/questions into a single, final review PDF document, which was separate from the main notes. Doing this allows you to review only those areas of the content that you actually need to work on, which saves you a significant amount of time.

The screenshot shows a Microsoft Excel spreadsheet with a table titled 'Control Environment' on the left. The table has five columns: Control Environment, Risk Assessment, Control Activities, IT, and Monitoring. The rows contain information for different topics: 'INTERNAL CONTROL FRAMEWORKS', 'ENTERPRISE RISK MANAGEMENT FRAMEWORKS', 'ECONOMICS', and 'FINANCIAL MANAGEMENT'. The 'INTERNAL CONTROL FRAMEWORKS' row includes sub-sections like 'COSO I/C PRINCIPLES OVERVIEW' and 'I/C PRINCIPLES DETAIL'. The 'ECONOMICS' row includes sub-sections like 'MICROECONOMICS' and 'MACROECONOMICS'. The 'FINANCIAL MANAGEMENT' row includes sub-sections like 'CONCEPTS AND TOOLS'.

Control Environment	Risk Assessment	Control Activities	IT	Monitoring
Ethical Values—"Tone At The Top"	I/C Objectives	Risk Reduction	Quality Info	Ongoing & Periodic
Board independent from management, responsible for overall strategy.	Assessment of Risk	Technology Controls	Internal Communication	Address deficiencies
Management independent from board, responsible for daily controls.	Fraud	Policies relating to control activities	External Communication	
Competence	Change Management			
Accountability				

Figure 67 The above is a screenshot of a screenshot of a summary Excel sheet that I created for the BEC section of the CPA exam copied/pasted into a PDF file as a JPEG. A bit derivative, I know, but it gets the job done.

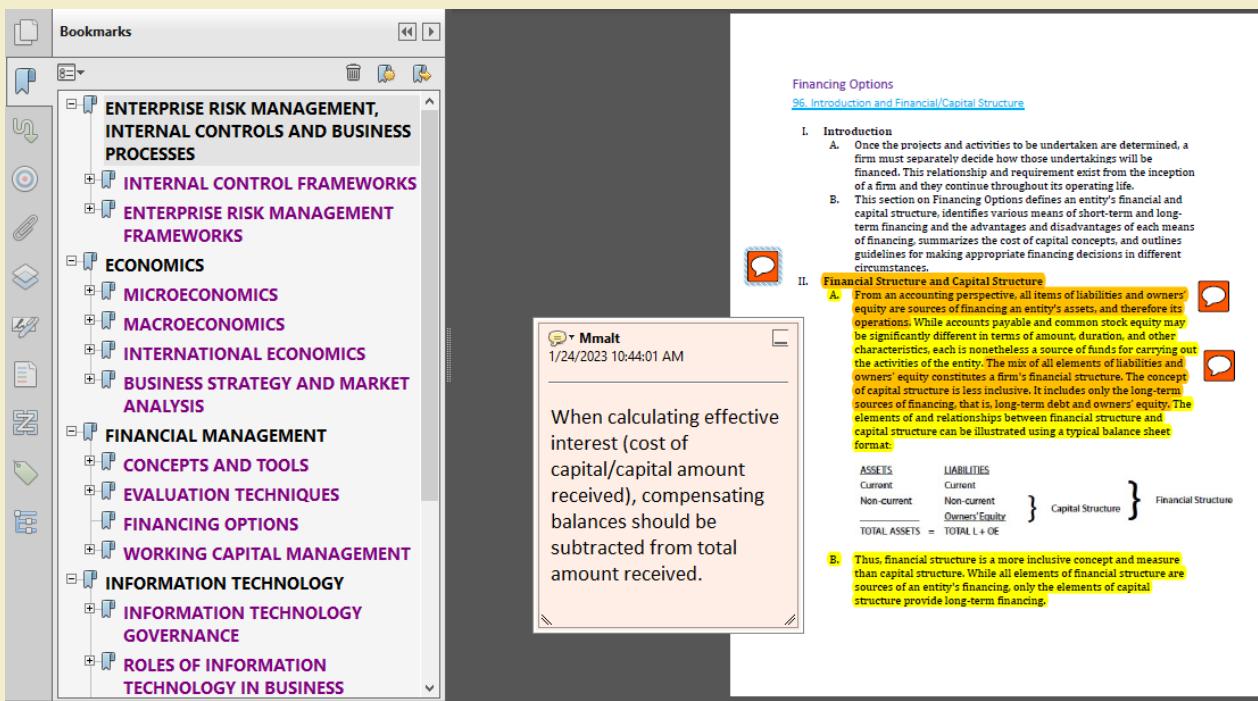


Figure 68 When taking notes, you can use bookmarks to organize the overarching layout of modular sections, different-color highlights to mark-up important aspects of the text, and sticky note comments (created with the "S" key) to write out your own personal notes, which should be utilized to emphasize items of particular importance, and to fill-in gaps within the material. The power of using a PDF file as a container for any sort of knowledge work is that it allows you to have instant access to all of this information in one place.

Also, don't forget that different-level modules in the PDF file should have different level headings in the original Word document to match (this should be done before the Word document is converted to PDF). For example, in the screenshot above, the text "Financing Options" at the top-right-hand-side of the page has a Level Heading of 2 in MS Word, while the actual module text below ("Introduction and Financial/Capital Structures") has a Level Heading of 3. Level Heading 1 (the most general heading) belongs to "Financial Management", which is the highest-level of modular classification in the above example, and can be seen conceptually reflected in the bookmarks on the left.

The screenshot shows a Microsoft Word document titled "3. BEC NOTES - Word". The ribbon menu is visible at the top. On the left, there's a "Navigation" pane with a search bar and a tree view of document sections like "Discounted Payback Per...", "Accounting Rate of Ret...", "Net Present Value Appr...", "Internal Rate of Return...", "Project Ranking", "Capital Project Ranking...", "Financing Options", "Short-Term (Working Capital)...", "Long-Term (Capital) Financing", and "Common Stock". The main content area contains a section titled "Financing Options" with a sub-section "96. Introduction and Financial/Capital Structure". Below it, there are two numbered sections: "I. Introduction" and "II. Financial Structure and Capital Structure", each with a list of bullet points.

Figure 69 The same section as seen in the source Word document, before being converted to PDF form. Note how the headings are used to mirror the hierarchical structure of the modules themselves. Remember that, in Word, headings can be applied with the format painter (^+C/^+V). To copy the heading's formatting, just place your cursor on the line, and use the format painter. You don't need to select the entire line to sample & apply a heading, as headings function on a per-line basis.

The screenshot shows a Word document with a table of contents on the left and a sidebar on the right for "Review" and "Comments List". The sidebar lists several comments from "Mmalt" on various pages (23, 32, 37, 45) with timestamps and content. The main content area includes a section titled "FAR COMMENTS FINAL REVIEW" with a numbered list of items, a "Relevance: PCM" section, and a "Faithful Representation: CNF" section with acronyms P-PREDICTIVE VALUE, C-CONFIRMATORY VALUE, M-MATERIALITY.

Figure 70 Also, when the time comes for final review, I would strongly recommend consolidating all of the sticky note comments you have made throughout your main PDF outline into a single Word document. This final review document can then be added to the main PDF as a single, overarching repository of your most important/most valuable personal notes, which is simply the sum-total of what you have already written—only now it can be found in one place.

Finally, with regard to test-taking itself, I have found the vast majority of professional test-prep services to be profoundly useless and unhelpful in practice, and so I will briefly touch upon the strategy that actually worked, at least for me. The most common advice given to you by test-prep services is to create cumbersome outlines for each question, and to “take the easy test first”. This is, in fact, extremely stupid and unhelpful advice. Both approaches completely fail to account for the logistical time-crunch inherent in just about any standardized testing environment. I believe that what you should seek to do instead is to solve as many problems as possible purely in your head, and to utilize written scrap-paper outlines sparingly, which is to say, only when absolutely necessary. The general three-stage process for answering any given standardized test question should go something like this:

1. Relax. Read through the entire question completely. Don’t try to understand. Just read each sentence once all the way through without stopping. There is no point trying to answer the question until you have all the relevant information, right? So, relax and just read.
2. After this initial read-through is complete, if the question is relatively simple and you can answer it immediately, do so without hesitation, and, as fast as you possibly can, move on to the subsequent question in the series. In my experience, there simply isn’t enough time to second-guess yourself, or meta-game the questions during the exam. Move on.
3. If you cannot answer the question on the first read-through attempt, don’t worry. Read the question a second time, but this time, try to actively understand the problem. If the question has multiple relevant values, write down each critically significant value: if you need to label some values, do so, but ideally, try to keep the written outline as short as it needs to be. Do any calculations necessary for the question, and answer the question. If the question is multiple-choice in nature, and you see the final result of your calculation as one of the answer choices, select it and move on without hesitation. If you don’t see it, try to quickly redo the calculation one more time—if doing so won’t take too many seconds off the clock. Guess if you have to. Move on no matter what after the second (or at most third) calc attempt.

Review your most important/relevant bookmarks the day/morning before the test. If the exam can be easily retaken an unlimited number of times (as is the case, fortunately, with the CPA exam), don't bother too much with practice tests (although you should definitely do modular practice questions—concurrently—as the main outline notes are being constructed for each section). Once the primary PDF outline has been finished, try to go-in and take the actual exam as often as possible.

Lastly, right after finishing the exam, write down in a note-taking app on your phone what sections of the material you probably answered incorrectly: add this valuable information to your consolidated notes once you get home. You don't need to wait for the results, or some half-baked "official" review, to tell you what you probably got wrong. You know. *You know.*

Contest every piece of ground. Don't look back. Don't feel pity. Just calculate answer, and move on to the next question.

WORD—MISC

G-146

AII

The main point of taking iterative notes in Word is to use said iterative notes as an easily-accessible repository for your organically evolving set of professional insights. In this way, you can avoid making the same mistake twice in your work. And the main point of doing *that* is to save you the time you would have otherwise wasted making the same mistake over and over again. Adopting this attitude toward your mistakes and failures really pays-off in the long-run, in my experience.

G-147

AII

After creating a heading, you should immediately insert an empty line below it, so as to avoid inadvertently creating “empty” headings by accident later on. You can also use the right-click Paragraph menu of each heading to set whether it is open or closed by default. Furthermore, you can create a Table of Contents for all headings in a document by utilizing [References>Table of Contents](#).

The screenshot shows a Microsoft Word document window. On the left, the 'Navigation' pane is open, displaying a hierarchical list of headings under 'Inputs'. On the right, the main content area shows a 'Table of Contents' (TOC) titled 'Contents Rebate'. The TOC lists various sections and their page numbers, corresponding to the headings in the Navigation pane. The 'Navigation' pane includes tabs for 'Headings', 'Pages', and 'Results', and a search bar at the top.

Contents Rebate	
Inputs.....	7
2020 Recovery Credit	7
W2-Wage Income	8
Box 14.....	8
K1: Income From Pass-Through..	10
K-1 1041: Estate or Trust	10
Form 8995 Qualified Busine...	10
Publicly Traded Partnership...	10
ES Pmt Dates	10
1095 A, B, C	11
1099-R—IRA and Pensions	12
If Spouse Inherits IRA:	12
If Non-Spouse Inherits IRA:	12
Spouse Inherits Roth IRA	12
Non-Spouse Inherits Roth I...	12
1099 INT—Interest	12
-Form 1099 OID/Bonds	12
1099 K--Credit Card Revenue	12

Figure 71 The first page of my own iterative notes as a CPA tax accountant. It is advisable to use headings, and to create a Table of Contents, since doing so generally makes it much easier to navigate your notes with **CTRL+F**. The best advice I can give here is to just let the notes evolve naturally & organically over time. These informally professional notes are a place for anything that is relevant, but not obvious, in the course of your work.

G-148

All

If the formatting behavior of your Word document starts to become extremely frustrating, slow, or unresponsive, use the native Word shortcut **!H8** to show/hide paragraph markers. This should allow you to “see” the various layout variables effecting your document in an easy-to-understand form that you can then edit.

G-149

All

If you want to create a filled line in Word, like so (—), place two dash lines (--) after a letter, and type another letter after the dash-lines—then hit space. If you don’t want the filled line in that specific location, you can copy/paste the line to wherever you may need to in the document, or elsewhere.

G-150

All

Screenshots are an extremely powerful situational tool when used alongside Microsoft Word. On Windows, you can take a screenshot with **WinKey & Shift & S**, which can then be copied/pasted into a blank Word document. This can enable you to create temporary scrapbooks of relevant information that are generally much easier and more convenient to access than the full desktop applications from which the original source data was derived.

EXCEL—MISC

All

When using multiple filters in Excel, work your way backward from the last filter that was most-recently applied to fully understand the data you are looking at. The little grey icons on the top row indicate which filters are active:

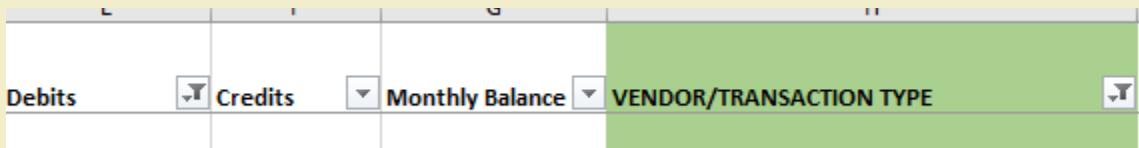


Figure 72 Use the little grey icons on the top row to easily see which filters are currently applied. If multiple filters are active, remember which filter was most recently added to the stack.

All

Pivot tables can be formatted much like any other part of the spreadsheet canvas, using the same shortcuts as you would normally use. For example, the decimal place, datatype and highlight color of cells inside a pivot table may all be changed, as they may be for any other cell. The Excel format painter can also be applied to pivot tables as well.

	A	B	C	D	E	F
1						
2						
3	Row Labels	Sum of \$				
4	AUTO EXPENSE	\$8,259.40				
5	BANK SERVICE CHARGES	\$332.56				
6	BUSINESS LICENSES AND PERMITS	\$504.50				
7	COMPUTER AND INTERNET EXPENSES	\$74.63				
8	INSURANCE EXPENSE	\$27,263.46				
9	MATERIALS	\$164,658.99				
10	MEALS EXPENSE	\$17,935.26				
11	MISCELLANEOUS	\$507.98				
12	EZ CONTACTS	\$166.97				
13	KENLY	\$176.42				
14	SPIRIT AIRLINES	\$164.59				
15	NJ CBT	\$1,504.50				
16	OFFICE SUPPLIES	\$4,168.13				
17	OUTSIDE SERVICES	\$3,323.66				
18	POSTAGE	\$419.80				
19	PROFESSIONAL SERVICES	\$9,485.00				
20	REPAIRS AND MAINTENANCE	\$11,956.75				
21	REVENUE	(\$341,513.16)				
22	SHAREHOLDER LOANS	\$67,171.50				
23	TELEPHONE EXPENSE	\$4,792.51				
24	UTILITIES	\$20,964.09				
25	(blank)	\$0.00				
26	Grand Total	\$1,809.56				
27						
28						
29						
30						
31						

Figure 73 A pivot table general ledger of accounts with formatting applied to it.

Also, remember that if the source data used to create a pivot table changes, the pivot table itself does not need to be re-created from scratch, but can be dynamically updated. The easiest way to do this is by hitting “Refresh” on the right-click menu of the pivot table:

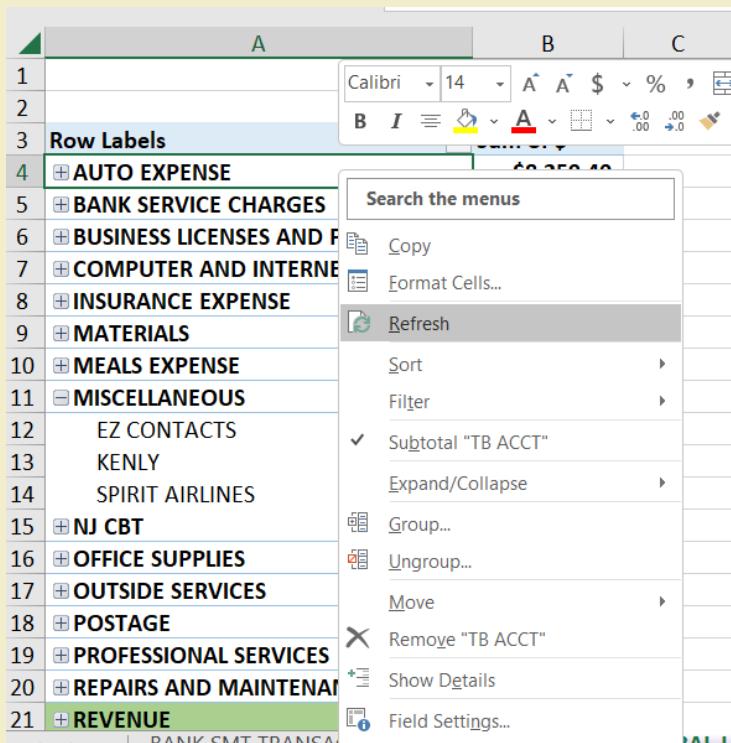


Figure 74 Updating a pivot table to dynamically adjust summary-totals, in order to account for alterations in the underlying data used to create the table.

Additionally, if any empty/non-numerical data are present in the column that the pivot table is summarizing, numerical values will not display properly inside the pivot table. The most straightforward method to resolve this issue is to simply not have any empty rows present in your Excel sheet. However, when utilizing Companion, the AddZeros macro (**M Tab & 3**) can be used to replace all empty cells in a column with a grey-colored 0 value. This will allow a pivot table to successfully sum the values in that column.

AII

You can generate random numbers in Excel with the RAND() and RANDBETWEEN() functions. This can be useful in quickly implementing data for testing. For example, to generate random dates starting around 2009, use the following function: RANDBETWEEN(40000,46000). You can then convert the resulting numerical values into proper dates with **M CapsLock & G**, or use the formatting options in the right-click menu of the

G-154

cell to do the same. Once the sample data has been auto-generated, use Paste as Values (**CTRL & ALT & V**) to prevent the randomizing function from altering it any further.

All

If all of the data in an Excel sheet seems right, but you still aren't seeing the expected results from your functions, there are probably two factors you should check before doing anything else: cell whitespace & cell datatype. Whitespace is considered as having substance in Excel, as well as most other programs. In other words, whitespace is not a *nothing* value. It is a whitespace unicode value, with its own bit allocation in the computer's memory. An app must be specifically designed to ignore trailing whitespaces for this to not be the case. You can even use Find & Replace to substitute an empty space with a genuine *nothing* value. The upshot of all this is that you should make sure your whitespace properties are consistent across all cells in a column.

As noted above, the find and replace feature (**CTRL+H**) can be used to remove unnecessary trailing whitespaces in Excel. First, click inside the cell and copy *one* empty space that you would like to remove, paste the empty space into the Find field, and leave the Replace field blank. Once you hit Replace All, the empty spaces should now be removed across all cells/rows selected.

Table 2.11 Employment and output by industry (Employment in thousands of job)		
	Industry	Output, 2011
3	Total ⁽¹⁾⁽²⁾	28,475.0
5	Nonagriculture wage and salary	28,026.2
6	Mining	559.5
7	Oil and gas extraction	326.9
8	Mining, except oil and gas	130.5

Figure 75 Copy the trailing/unicode whitespace inside the cell. With Materiality active, place the cursor immediately before the first letter in the formula bar, and press Tab & A to select. Copy with **CTRL+C**. Paste into the search dialog box with **CTRL+V**.

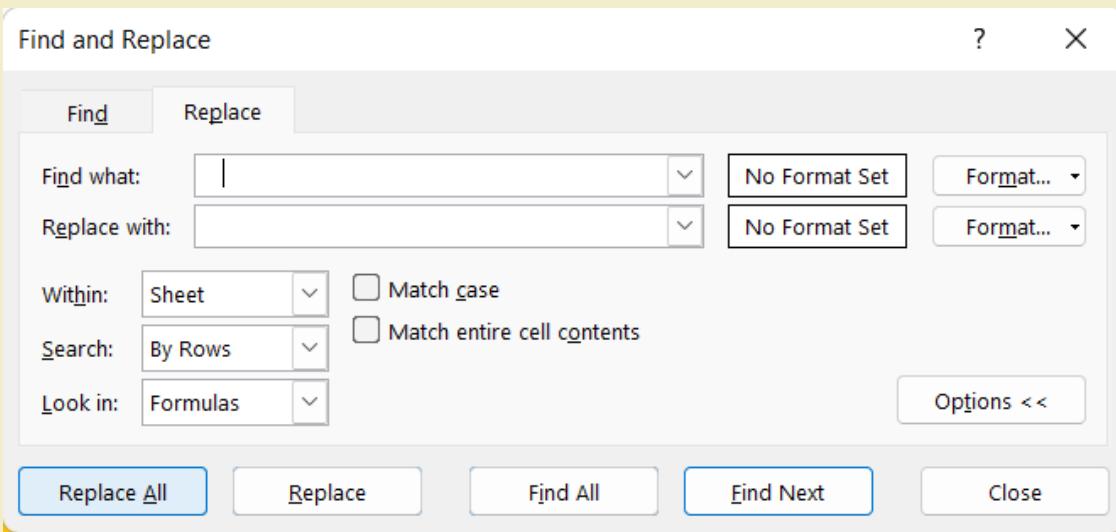


Figure 76 Replace the trailing whitespace inside all cells within the Excel sheet. Bring up find/replace with **CTRL+H, and paste the unicode whitespace inside the Find field. Keep the Replace field blank, and hit Replace All. This should eliminate all trailing whitespaces inside the Excel sheet, and allow the cells to have consistent-uniform formatting applied to them.**

As for datatypes, a similar principle applies: Excel functions may not behave as expected if the “wrong” datatype is mixed-in with a column of a different datatype. For example, a number classified as General data and a number classified as Numerical data will behave incompatibly, if there are additional invisible unicode characters creating interference between the two values. Use the **M_CapsLock & A/S/D/F/G** shortcuts to ensure a column’s datatype uniformity.

All

If you have the profound misfortune of running into an Excel sheet containing merged cells, the native Excel shortcut **!HMU** can be utilized to unmerge the cells. To achieve the intended effect of merging cells, select the cells you wish to merge, go into the formatting menu of the cells, and under the alignment tab, switch the horizontal setting to “Center Across Selection”.

Frankly, I don’t like this either. Just use Excel normally.

G-156

>All

The ampersand (&) symbol can be used to concatenate values across multiple cells, which is useful when data that should be in a single column are spread out across many columns.

G-157

All

If you have a particularly sensitive Excel file, you can implement encryption for that workbook (which should prevent unauthorized access) by going into **File>Info>Protect Workbook**. From this same set of options, you can also protect the sheet-structure of the workbook, and mark the workbook as final. Also, if you ever have the truly miserable experience of losing an unsaved Excel file, you can attempt to recover unsaved workbooks from the Manage Workbook menu located here as well. The above options are also available in Word, and most other Microsoft Office apps.

G-158

All

When reconciling two Excel sheets (or two workpapers in general), trace/subtract from that which *is accurate* to that which *might be inaccurate*. Use highlights to mark-off and classify elements as you go.

G-159

All

While Excel's auto-fit feature is often the best setting to use in order to determine the spacing of your sheet, there are times when the width/height dimensions of various cells must be manually adjusted with your cursor. By clicking on the width/height axis of each column/row, it is possible to see the precise pixel dimensions being applied across cells: this can give you a more accurate metric for formatting spacing, as compared to just eye-balling the width/height dimensions.

Also, when dealing with multi-line text inside a cell, don't forget to use the Wrap Text feature—as well as manual spacing adjustments—to ensure that the dimensions of the cell containing the text are reasonably well-formatted. To work with Materiality, Wrap Text should occupy the 7th position from the left on your Excel toolbar, and is called with **M__Tab & Space** by default.

Width: 20.78 (194 pixels)

Table 2.3 Industries with the fastest growing wage and salary employment (Employment in thousands of jobs)					
	A	B	C	D	E
1	Industry Description	Sector	Wage and Salary employment, 2021*	Wage and Salary employment, 2031	Wage and Salary employment change, 2021-31
2					Compound annual rate of change, 2021-31
3	Promoters of events, and agents	Leisure and hospitality	129.6	180.4	50.8
4	Amusement parks and arcades	Leisure and hospitality	161.3	221.8	60.5
5	Performing arts companies	Leisure and hospitality	82.0	110.4	28.4
6	Individual and family services	Health care and social	2,708.4	3,558.4	850.0
7	Support activities for mining	Mining	227.1	296.7	69.6
8	Spectator sports	Leisure and hospitality	119.4	155.9	36.5
9	Other information services	Information	378.3	491.2	112.9
10	Other personal services	Other services	313.7	400.9	87.2

Figure 77 Place your cursor at the border axis of each column/row, so as to adjust its width/height. Storing even relatively small amounts of text data within an Excel sheet can throw-off the dimensions of the cells, making the sheet extremely inconvenient to read and scroll through. To limit the deleterious effect of string data on Excel, use Wrap Text, and manually adjust the width of columns containing the string data to the precise dimensions needed.

Alternatively, you can use the native Excel shortcuts !HOA and !HOI to adjust row height and column width, respectively.

ÅII

Use the Show Formulas hotkey (**CTRL & Tilde**) to see at a glance which cells contain formulas, and which cells contain hardcoded values. This can be useful when clearing out hardcoded cells from an Excel template, or an Excel sheet that someone else has prepared.

ÅII

Remember that, in Excel, there is a critical distinction between copying a cell via Excel itself, and copying the *internal contents* located inside that cell via the OS clipboard. Therefore, pasting the text directly from the OS clipboard to the formula bar up on top can sometimes avoid errors that copying/pasting the cell via Excel itself would naturally create. This is because Excel does not attempt to dynamically adjust information that is copied/pasted directly from the OS clipboard into the formula bar, whereas this very much *does* happen with Excel's native copy/paste functionality.

G-162

All

To quickly alternate data between columns and rows, use Transpose in the right-click copy/paste menu.

G-163

All

Use the IFERROR() function to catch #REF!, #DIV!, and other common errors before they occur, by setting an alternate operation to perform instead.

G-164

All

Learn to code not for the sake of learning to code. Learn to code because it is like learning the underlying Latin upon which all software is based. Learn to code for the sake of learning how to use Excel and VBA effectively.

G-165

All

To run spellcheck on a selected range of cells, press F7. This also tends to be the general spellcheck shortcut in other apps as well.

G-166

All

Remove Duplicates (**!AM**) is one of the more useful generic features of Excel that you should be utilizing (and that should therefore be placed on your Excel Quick Access Toolbar). Also, you can use Conditional Formatting to highlight & remove duplicate values as well. Make sure spacing is equivalent across the target cells before using either of these features. Similarly, the UNIQUE() function returns unique values from a given input range of cells.

G-167

All

If you are writing VBA macros for Excel, define Long variables instead of Int variables. Long quantitative variables can store much larger values when compared to regular Ints. As a result, the macros you define will be capable of handling a much greater volume of input data.

Digital Meditations

G-168

All

Ideally, your Desktop should be as empty as possible, containing only those app shortcuts which do not fit neatly on the taskbar. Individual files & folders should generally not be on the Desktop at all, and should instead be accessed through the File Explorer. Remember that the File Explorer should be the default means by which you navigate your PC, and that a particular focus should be placed on accessing files through the Quick Access and Recent Files menus. A similar minimalist-layout principle should be followed across all of your other devices as well.

By removing that which is frivolous, you make room for that which is necessary, and that should be more than enough. The minimal number of inputs for the greatest number of outputs is always ideal—all else being equal. To that end, get into the habit of viewing Space as Substance: empty container space of any kind, whether digital or physical in nature, has real economic value that should be measured relative to the value of the most useful elements that space can theoretically contain.

G-169

All

Use the CTRL+Z/CTRL+Y undo/redo shortcuts to rapidly cycle through your most recent workflow in any given desktop app. Be aware, however, that certain event-actions (such as the triggering of Excel macros) cannot be undone, as they break the workflow chain continuity on which undo/redo is based. Once you develop the proper digital sense for it, you can almost instantly return to any relevant point in the timeline of your most-recent workflow.

Remember that—in the immediacy of a digital landscape—your work can be remade at will. Any previous moment can be recalled at any time.

G-170

All

If you are using a virtual machine (VM) in your work, remember that files can be copied/pasted back and forth from the VM to your local machine, and from your local machine to the VM.

G-171

All

When viewing a structured table or plotted graph for the first time, read-through all of the heading and axis labels first, before trying to interpret the data itself. This is a strategy that prevents you from being cognitively overwhelmed by a table/graph containing a large amount of text or visual data. Look first to the peripheral edges, not the immediate center. Then read left-to-right, top-to-bottom.

G-172

All

When there are exceptions, it should not be necessary to say that there are exceptions. A reasonable person, acting in good faith, understands this obviously simple fact, and so judges the general premise being advanced on its overall, aggregate merits.

G-173

All O

Understand what [Big O Notation](#) is. Your workflow should ideally be completed in $O(1)$ time. At the very least, your workflow should be completed in $O(n)$ time. Your workflow should **never** be completed in $O(n^2)$ time or above.

G-174

All

Whenever you encounter a new piece of software, give yourself at least 45 minutes to look through all of the options and settings of that software, in order to discover what each part of the program can do (i.e. to discover any secrets). Search Google for any tips, tricks, keyboard shortcuts etc...that others have found (or experiment with the app to find/create your own!). See if the app supports multiple tabs by using **CTRL & LButton** to try and open new tabs within the app. Keep in mind that time invested at this initial stage of working with the new software may very well result in a great bounty of many more labor-hours saved down the line.

G-175

All

Do not apologize for the crimes of dead men.

G-176

ÅII

When you go to physically print-out a document, you don't need to add extra margin (spacing) to the edges of the document: the printer will add margin automatically, unless you have altered this default setting.

G-177

ÅII

If a desktop app is not showing the layout or formatting you expect it to, don't panic. Check the View menu of the app if it has one. Also, be sure to check the right-click menu of the app on various different panes (sections of the app) to see what options you have available to you.

G-178

ÅII

Similar to the discussion of indexing in Excel, use a symbolic key consisting of some rational mix of numbers & letters to generate an index for any highly-complex system you create: doing so makes your system much easier to cross-reference for both yourself and others.

G-179

ÅII

Use a cloud-provider, such as OneDrive, to store your files and folders (assuming privacy is not too much of a concern). This gives you both much greater storage capacity for your workpapers, as well as improving your version control safety-net, as you can, for example, now more easily recover previous versions of a file from that file's right-click menu.

G-180

ÅII

A technical system—any technical system—reaches maximum efficiency when it is utilized at scale by the end-users of that system in the most optimal way possible for those end-users to do so. This point of maximum practical system efficiency at scale may (or may not) line up with the highest-possible theoretical efficiency of the system, as understood by the designers and developers themselves.

G-181

>All

There is too much focus on big data in my opinion. Most data, at the level of practical analysis, is not big data. Most data is a pain in the ass caused by other people's incompetence and poor organization skills. We should all plan accordingly.

G-182

All

Be wary of those who speak in vague, boilerplate generalities without ever elaborating on their broader point. Generalities are only legitimate if they serve as a gateway to specifics that provide real value, and actionable insight.

We must know not just what is to be done, but how it is to be done.

G-183

All

It is a myth to say that the Industrial Revolution started with the steam engine. Its true genesis was with the abolition of onerous feudal ties and privileges, as well as the corresponding rise of free labor in the context of an agrarian market economy, the standardization of weights & measures, and the adoption of rational, mass-production workflows—themselves mere precursors to the Taylorist & Fordist theories of Scientific Management that would drive the “Second” Industrial Revolution of the late 19th/early 20th century. I believe this often overlooked historical dynamic has much to teach us today regarding the true nature and source of innovation.

G-184

All

When you go to name things (files, folders, programming variables etc...), make sure that the names you choose to bestow upon the things are reasonably easy for others to remember, pronounce, and spell. Being Adam has its responsibilities.

G-185

All

I do not embrace it because I can Account for it. I do not reject it because I can Account for it.

Silence Is Power. So Is Plausible Deniability.

All

On The Technological Myopia of The California (Computer Science) Ideology

From an engineering standpoint, I do think Silicon Valley has an undue bias toward developing structured big data solutions, as opposed to building specialized machine tools and algorithms for solving complex problems that exist at a much more granular, small-to-medium-scale. Our age has thus seen vastly greater innovation in bits than in atoms, but even when it comes to the bits, we have yet to achieve anything resembling true mastery.

As an example of the above, most of the white-collar workforce consists primarily of people e-mailing not-particularly-large Excel and PDF files to each other. This is actually perfectly fine. Most professionals—whether in the blue or white collar sector of the economy—are essentially skilled artisans: paid to solve specific problems, for specific clients, in specific (often non-repeating and non-replicable) circumstances. They need precise-modular tools that can be called at will much more than they need solutions of scale. I've had plenty of challenging work as a CPA (including on large, multinational clients). I've never once run into a situation where I thought PowerQuery, PowerPivot, or most other ETL solutions, would be even remotely useful or worthwhile to implement. PivotTables, yes, but nothing beyond that most basic level of Excel aggregation, which is already quite substantial relative to the needs of most office workflows.

And honestly, while solutions for handling big data at scale are by no means useless, I believe this inherent tech industry bias—the sort of bias you have in regard to innovation if your industry runs networks and social media sites hosting billions of daily active users—explains why the rise of the internet has coincided with productivity growth in the rest of the economy that is, at best, sluggishly mediocre. In a paradoxical sense, to develop truly effective technical innovation, I believe it is necessary to think small across a very large scale: to optimize the underlying logistical processes of the great, mundane-mass of the economy, not simply the leading lights of the most advanced (and most fortunate) industries.

We should, perhaps, rediscover the old wisdom that there is plenty of room at the bottom. There is plenty of fat to be trimmed in the middle too.

¶

The Secular Stagnation Thesis Is Wrong

There is plenty of low-hanging fruit yet to be picked. All value is a matter of cost in labor-time relative to the use-value derived by the consumer, and the exchange-value derived by the capitalist. All technology is a matter of rational, labor-saving-devices meant to enable the creation of use and exchange value. Therefore, if aggregate economic productivity growth is depressed relative to the recent past, we need not ask the question of why: the "Why" here is quite obvious, is it not? Low productivity growth implies, essentially, low growth of labor efficiency for the entire economy year-on-year. To increase per-capita economic productivity is simply to increase the efficiency and output of labor-power, by whatever means it is necessary and practical to do so. The "How" of doing this is the difficult part, or it *would* be difficult, if we had already optimized every major economic sector to its maximum point of practical-technological labor efficiency. However, we plainly have not done this, even in the most advanced national economies, and so, from the Neo-Taylorist perspective, both the "Why" and "How" are actually fairly simple to answer and understand.

Of course, there is much engineering and building work yet to be done, but what is to be done? That is not in the least bit in question.

¶

We must transform as many of our atoms into bits as reality will allow, and then (the factors of production having been so ennobled) we must turn right around, and radically Accelerate the remaining atoms that have not yet been digitized.

¶

Only people care about money, goods, or services. Machines do not. Natural resources do not. Lines on a graph do not. Cells in a spreadsheet do not. All costs in the economy are labor costs in the grandest possible sense.

G-190

All

If you want to understand the true role of something, don't just comprehend its strengths and weaknesses, but its logically inherent limits as well. If something is beneficial in nature, at what exact point of marginal utility would it become counter-productive? Conversely, if something is harmful in nature, at what exact point of diminution would it potentially become a positive force? That's how you should think about these things. You don't always need to push the limits, but you should know where the limits are.

G-191

All

The Labor Theory of Value may not be technically correct in a purely macro-economic sense, but I honestly believe that society was better-off when most people thought that it was. The application of technology in our age has been rather lackluster precisely because (being the beneficiaries of more "enlightened" modern economic theory) we have emphasized consumerism over producerism. A culture steeped in labor-theory-of-value assumptions builds the assembly-line and the internal combustion engine. A culture steeped in marginal-utility consumerist assumptions builds Snapchat and Instacart.

And for the record, there were a myriad of people not named Karl Marx who historically believed in some variation of the labor-theory-of-value. It was widely considered not just common-sense, but a key pillar of the entire pre-modern social contract across many civilizations. Marx was certainly not the first thinker to formulate this concept.

Look to the past to know how to Accelerate the present so as to build the future.

G-192

All

On that note, I have come to the view that the opposite of the decadent consumer is not the impoverished hermit, but the prosperous artisan. Such a person defines his or her identity and self-worth not by what he or she buys, but by what he or she makes.

AI

The primary concern that I have with AI going forward is that we will see a great deal of buzz & hype surrounding it, and even a wide assortment of impressive pilot demonstrations of the technology as such, but 10 to 20 years from now, not much will have changed in the broader economy. After all the hype has died down, there will be no great increase in underlying-aggregate economic productivity. Why? Because, at this point in the material-technological development of Capitalism, most people (and especially economic elites) are so alienated from their own labor—or from what labor even *is* in the first place—that they will not know how to make full use of AI's potential. They will treat AI as a magic black box that they can use to make slightly "better" (i.e. more derivative) online content, and not as a rational labor-saving device to transform the real economy.

And if you doubt that this can, in fact, happen, just look at what happened with Microsoft Excel. For decades, absolutely no one even tried to understand its true potential, or optimize it from the most basic office labor-efficiency standpoint.

It is not my intention to be a contrarian edgelord with regard to AI, or anything else for that matter. Just because a viewpoint is an "Establishment" viewpoint does not make it false, and just because a viewpoint is an "anti-Establishment" viewpoint does not make it true. In developing Materiality, I have benefited to a significant extent from the infrastructure (including AI in the form of DALL-E 2) that Silicon Valley has developed and deployed at scale. I fully acknowledge this, and am grateful for it.

That having been said, we must remember that there is a meaningful difference between tech being *impressive*, and tech being *economically-useful*. Technology is not magic. It is, and must be, a rational labor-saving device. In order to fully understand this, one must have an intuitive grasp of—not just technology—but the nature of labor itself. Go to the people, and spend some time working in food service, an Amazon warehouse, or a small accounting firm, and you will see what I mean by this. I would not be where I am today as a CPA, developer, or systems analyst without these formative experiences of labor. This too, I am profoundly grateful for.

>All

No I am not a Marxist or Socialist. At the end of the day, all economic value is revenue minus expenses, all expenses are labor, and all useful technology is a rational tool used to save labor-time, and so multiply labor-power in the production of useful output.

The above are fundamental realities of all economies that should be remembered regardless of politics, temperament, or metaphysical philosophy.

All

I consider myself apolitical: I am not a political or ideological activist of any sort.

Some would say that the decision to be apolitical is itself a highly political act. I would agree.

The social alienation that the left (and sections of the far-right) recognize as existing under Capitalism is, in my view, the social alienation that is an inherent reality in all of urban-technological modernity. It can only ever be understood and addressed as such, and (since we cannot possibly go back to a previous incarnation of technological development) we must bravely march forward and hope for a brighter future in doing so. In other words, we must Accelerate.

This is not to say that Capitalism itself does not create alienation, but fundamentally speaking, I do not believe that I would be a happier or more fulfilled person if I worked for the government and could elect my own boss. I genuinely don't know how many people *would* be happier doing this, but perhaps implicit recognition of this fact is the root cause of general political apathy among the masses—especially as it relates to socialist appeals for worker solidarity. People with Bullshit Jobs work very little, and yet they are dissatisfied. NEETs don't have to work at all, and yet they are miserable.

We need a new religion much more than we need yet another dwarf-sectarian “radical” political ideology. God must live again.

Modern Man Is Not Defined By His Solidarity. He Is Defined By His Will.

HE IS SAVED BY HIS WILL.

AII

Don't fool yourself: there is a very good chance that I am just a more extreme version of what you already are, or will soon become.

I have adopted as a full-measure that which you fear to implement as a half-measure. I did so because I had no choice (I moved to the suburbs of New Jersey at 8 years old from Russia, and never really went outside much after that). Perhaps, unlike me, you have a choice. Perhaps not. Either way, promise to yourself no more half-measures going forward.

Remember that the ultimate goal of Acceleration is to transcend the situation or social structure being Accelerated. It is **not** meant to be self-destructive. It is a means to an end. Above all, the end is to not yet despair.

AII

With regard to the distinction between political and philosophical commentary, I believe there is a meaningful difference between surveying a filthy mud-trench from 10,000 feet in the air, and grinding your face into the dirt of said filthy mud-trench for masochistic, culture-war fun. In my work, I endeavor to do the former and not the latter.

AII

Understand that the different dialog windows of a desktop app represent distinct panes, with potentially their own local workflow chains. For example, the bookmark pane in a PDF file is *not* the same as the main document window. Similarly, the CTRL+F search dialog box in most apps is not equivalent to the main window of the app. Despite being unintuitive to most end-users, this distinction is actually quite important, as it implies that a separate workflow chain of events is potentially being recorded for actions in each window pane. Therefore, each dialog box within the app may be effected by CTRL+Z/CTRL+Y differently.

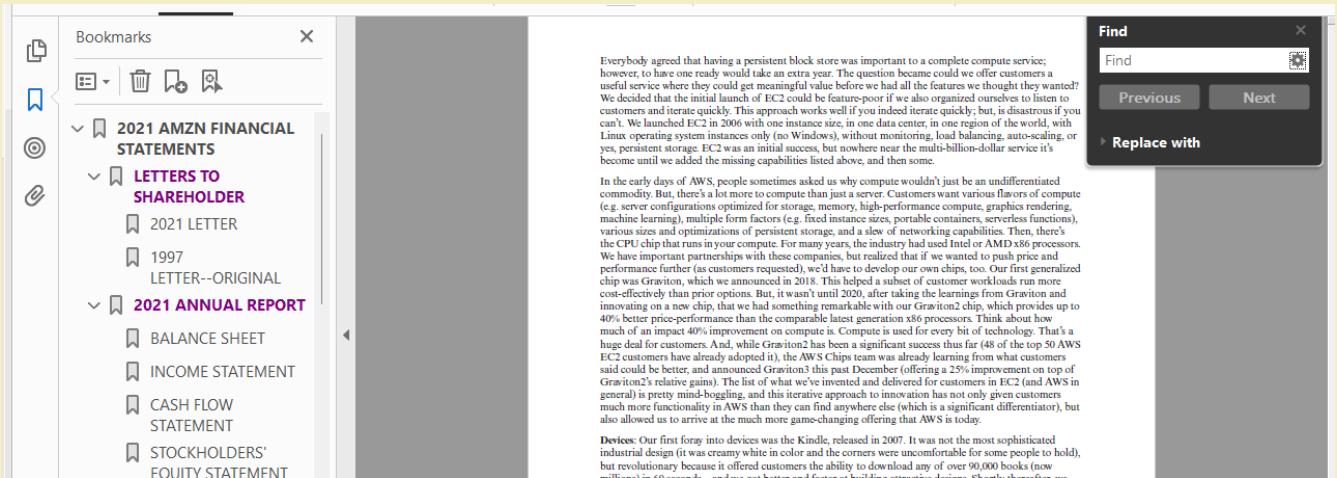


Figure 78 Here, we see three different dialog panes of the same desktop app on display. The bookmark pane, the main document view, and the Adobe CTRL+F search bar are all distinct greyboxes that grab the primary keyboard/mouse focus, when they are clicked on—or otherwise activated—by the end-user. When working on a desktop app such as this, it is therefore important to be aware of which pane/section actually has input focus at a given moment in time, and will therefore receive system commands.

G-199

>All

To reduce the stress on your eyes when working in a fully digitized environment, use the Night Light feature in Windows, which can be found under system settings. Similarly, to avoid straining your vision more than you have to, don't lean closer to the screen when you need to get a closer look at some aspect of content, but instead, zoom-in the desktop app itself with CTRL and the mouse-wheel.

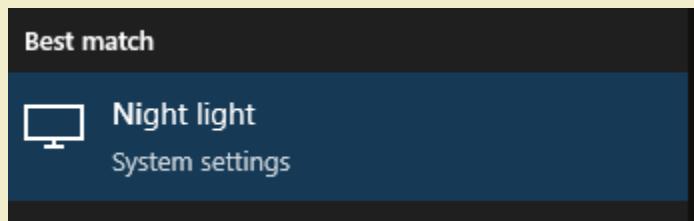


Figure 79 The easiest way to get to the Night Light setting on your Windows Desktop is just to search for it.

AI

My view is that AI will revolutionize and radically modernize those industries in which the quality of the final output is significantly subjective in nature, and the fault-tolerance is relatively high. Most creative fields, such as graphic design, advertising, and video production, fall into this category. However, I believe AI will generally struggle to fully, or even partially, automate those fields that are extremely precise and analytical in nature, such as finance, accounting, and law, or most skilled blue-collar professions, such as trucking, electrical engineering, or masonry. This is because the required work precision in these more “objective” fields is far higher—and the corresponding room for error much lower—than it normally would be in creative fields for the same quality of output.

For example, it really doesn’t matter (to most people anyway) if a digital ad, painting, or music video is slightly “off” relative to what the artist or designer originally intended: such compromises are an inherent aspect of the creative process anyway. However, it very much *does* matter if the annual financial forecast for a company is off by 20%, because the AI mistook a 0 for an O inside the source PDF file, and it matters even more if the AI piloting a “self-driving” car/truck makes an error in switching lanes on a busy highway going at a high speed. Given such practical concerns in economic fields in which exact precision is generally considered the bare minimum of competence, I believe AI in low-fault-tolerance industries will be restricted to a co-pilot role for a long-time to come.

AI

I didn’t put this in Part III because it would have ruined the vibe by being cringe, but a good trick I have learned for staying focused when doing productive intellectual work is to alternate a rubber-band between your fingers. Doing so is especially useful if (like me) you are the sort of person who tends to fidget a lot.

AII

The objective and the material define life, but the subjective and the mystical make life worth living. Material things always exist in reference to many perceptions, and this is as much a part of what makes up our world, and the human experience within it, as anything else.

AII

If you are subject to the [Male Variability Hypothesis](#), you should do everything in your power to make it to the other end of the distribution. Failure is unacceptable. Mediocrity, even less so.

åII

Fred W. Taylor—whatever one may say of his implied labor politics—was just about the only “management consultant” worth a damn. He was an actual engineer, possessing real technical insight, who created meaningful process improvements in the real economy. We should be fortunate enough to have men and women of half his talent and brilliance in our time.

I am perfectly fine with a 15-hour workweek, but *while* you are working those 15 hours, you should seek to be as efficient as possible in your daily tasks. That increased aggregate, macro-economic efficiency is why you would be able to have a 15-hour workweek in the first place.

AII

What is the role of the Neo-Taylorist Accelerationist? It is **not**, as some will claim, to chart the course of History over the long-term: we believe such things can only ever be pre-determined by the inevitable march of the underlying material-technological base. And yet, the role of the Accelerationist must not be that of a mere passive-observer either: on the contrary, the Accelerationist must relish, perhaps even fanatically so, the opportunity to be at the Elite Vanguard of material-technological-historical development. In reconciling these two seemingly contradictory notions, we find that the true role of the Accelerationist is found in speeding up the timeline: in bringing to fruition in days, weeks, or months those inherently epoch-shaping developments in the cultural & technological fabric of society, which—absent the crucial role played by the Accelerationist—would have taken years, decades, or even centuries to present themselves. The Accelerationist therefore cares nothing for following the herd, and its shallow corporate-vaporware hype: he or she seeks to create the greatest material-efficiency-multiplier across the entire world system, and thereby to ruthlessly bring into the present that which must, inevitably, exist in the future.

And above all, the Neo-Taylorist Accelerationist goes out among the people to bring them hope: that they don’t have to wait. That none of us do.

G-206

ÅII

We must remember that “The Economy” is not an abstract or theoretical concept: it is made-up of real people, doing real jobs, and taking real actions within the physical world. And as Taylor himself quite aptly noted, there is an ideal science for every action. We just have to find it.

G-207

ÅII

There are those legacy-idealist political forces in our society (whether on the left or the right) who wish to take an old frame of Capitalism and freeze it in place. They wish to “go back” to some previous incarnation of Capitalism as it existed in the 1890s, or 1930s, or 1950s, or 1990s etc...but this, of course, is not possible. Capitalism is not static, it is dynamic. Capitalism does not stand still or go back, it Accelerates forward into an ever greater and more powerful form.

Capitalism, in a sense, points us to our highest and most revolutionary ideals. We must therefore always strive to be at the Vanguard of its historical-material-technological development.

G-208

ÅII

In the liquid, all that is solid melts into air. We must go, ourselves alone. We must build, ourselves alone. We must transcend, together. In the End, we need each other, and we must promise to each other, another destiny.

G-209

ÅII

In your work, pay attention to the date that a document has been printed in either physical or digital form. This will allow you to discern a large amount of context.

G-210

åII

The worst thing is not to be controversial. The worst thing is not to be hated. The worst thing is not to die. No. By far the worst thing is to be forgotten, to be invisible.

Nobody wants to be, or to feel, invisible. Whatever else may divide us, I believe this is something that we all universally share to one extent or another.

G-211

¶

What can I say? It's always a bit of a sleight of hand.

G-212

¶

[Voyant Tools](#) is a great web-based, open-source app for performing text analysis. If you have a large corpus of unstructured string data, this app gives you a highly-effective method to find the most common linguistic elements. Remember that, per the pareto principle, 20% of inputs are often responsible for 80% of outputs in any given system or situation. Your job as a systems analyst (and we are all systems analysts) is to find the small number of inputs (in this case, words and phrases) which are responsible for a vastly disproportionate share of outputs in the system.

G-213

¶

You ask what programming paradigm I prefer to use? Have you not seen this very book?

G-214

¶

There are those who act and say without knowing why they act and say. I am not such a person. Having read this far, you probably know what I am, but one thing you may not quite yet grasp about me is that I...I also know exactly what I am.

G-215

¶

What truly amazes me are not the differences, but the similarities. In the End, they are all so much more relevant.

G-216

¶

I make mistakes. I make mistakes all the time—sometimes really stupid & elementary mistakes. The difference between me and most people though is that I make a good-faith effort to learn from my mistakes, and so not make the same mistake more than once. I remember. Eventually, it adds up.

åII

Reject the dystopian psyop of the open office. A professional should have a room of his or her own, or at least a reasonably sized cubicle.

Work-From-Home is a key aspect of Acceleration. Those who condemn it for perhaps marginally reducing the “productivity” of office workers do not yet grasp its vital significance to the future of our great civilization.

Office buildings should not exist. Through Acceleration, we will make Tyler Durden’s dream a reality.

ÅII

Multi-tasking is almost always a bad idea. Instead of doing multi-tasking, do Parallel & Asynchronous tasking. For example, let’s say you’re preparing breakfast. Multi-tasking is when you try to use the coffee maker and put bread in the toaster at the exact same time (bad idea). Parallel & Async tasking is when you put bread in the toaster first, and, while it is being toasted, you immediately go to start making coffee. Thus, both tasks are running alongside each other on separate tracks (i.e. their runtime execution is parallel), but they will not complete at the exact same moment (i.e. the return of their output is asynchronous in nature). This methodology has its tradeoffs as well, but it is generally a highly effective algorithm in programming, and in life.

ÅII

Either finish projects successfully or fail at them. **Not** “fail to complete them”. **No.** Complete them, *but fail*. Either way. Finish them. Determine what is to be done based on previous success or failure. *Do* what is to be done regardless of current success or failure.

ÅII

“Form Follows Function” is a call for the integration of harmoniously practical beauty in everyday things, not an excuse for unimaginative mediocrity, or irreverently trollish ugliness. We deserve a modernity that is genuinely heroic, elegant, and inspiring to the human spirit in its aesthetic character.

The beauty of a thing or action exists in direct relation to its practical use.

G-221

>All

You think I am him? Then you still don't get it. Focus more on systems than on people. You'll be him, if that's what you really want.

Am I him? I frankly don't care at this point. I'll take it if that's what it is. And yes, I can foresee even this much.

I Am what you only choose to pretend to be.

G-222

All

Systems made up of people are still systems. Despite their organic and social character, they can still be rationally analyzed in accordance with their empirically-observable, scientifically-applicable laws. Such laws are subject to nuance only to a limited extent, as the exceptions tend to cancel each other out.

And a nuance that claims to apply to everything says nothing.

G-223

All

The best way to learn about a topic is to completely immerse yourself in that topic for an extended period of time. For example, the least intelligent speaker of a language is generally more intelligent in conversing in that language than the most intelligent speaker of a completely different language. Such an immersive-learning approach is therefore almost universally acknowledged as the best way to learn a foreign language, and by extension, it is also the best way to learn anything else.

G-224

All

I believe the only nutritional/dietary supplements you should take are those in which your society/culture has undeniably and objectively been shown to have a mass deficiency in. For a modern life in the developed world therefore: get enough fiber, get enough sleep, get enough Vitamin D, and consider doing intermittent fasting—where you only eat twice a day with no snacking in-between. If you only eat twice a day, you get an extra hour everyday 365/days a year to work on your long-term projects, and that benefit in capitalized labor-hours inherently accumulates over-time. Do these things, and you'll be well ahead of the average person existing in liquid modernity.

G-225

åΠ

Nutrition should not be viewed as a form of lifestyle politics. It is a Means to an End, not an End in itself.

Also, if appropriate, use caffeine and modafinil in place of adderall.

G-226

ÅΠ

The value of rote memorization and phonics is severely understated in modern education. One cannot “think critically” without having learned the basics by heart. Nor can one take good notes or perform effective online research without having done so. Even in the world of instant digital access to information, the most efficient way to store relevant data is still in your brain. People who learn how to do this well will have an advantage by comparison.

G-227

ÅΠ

With regard to education, it should also be noted that students will not be tech savvy merely because they are of a younger generational cohort. The rise of iOS smartphone and tablet devices has abstracted away so much of the underlying computational logic from the end-user that students now often have [difficulty](#) understanding basic file systems and directory structures.

There is a very good argument to be made that these foundational concepts of digital literacy should be taught more explicitly and directly from now on.

G-228

ÅΠ

In addition to using copy & paste to speed up menial data-entry, it is generally preferable to make small edits to an element, instead of re-creating the entire element from scratch. I call this the Ship Of Theseus method of writing. For example, say I want to go from the number 590 to the number 690. Instead of rewriting/replacing the entire number, it would be much more efficient to place the cursor at 5, backspace, and replace it with 6. The same principle applies to editing strings of text, or any other type of data, as well. Remember that, with Materiality active, backspace is mapped to the **Tilde** key on the upper-left-hand corner of the keyboard, so there is no need to take your right hand off the mouse when applying micro-edits in this way.

All

There is not much use in creating a new, groundbreaking technology if you do not also do the hard work of developing a general theory, which outlines how to extract the maximum level of utility and efficiency from the use of that technology at scale. Hopefully, I have demonstrated at least that much.

For any new technology, there is typically a lag-time of around 20-30 years between when the technology is first made commercially available to the public, and true, mass economic productivity gains from the use of that technology at scale. I was born in 1994, so we seem to be more or less on track with regard to the Internet, as well as the implicit economic impact of modern video games (although I still maintain that office productivity software, such as Excel and Adobe, having been in widespread use since at least the late-80s/early-90s, could have been optimized much earlier had the intentional effort been made to do so).

Materiality is the current catalyst of this tech-generational cycle, but the real goal—the goal of *Breaking The Chains*—is to create a Perpetual Revolution in Human Conciseness as it relates to the very concept of economic efficiency itself, such that every subsequent technological innovation can be intentionally Accelerated, which is to say, intentionally optimized to achieve the maximum level of output relative to the needs and capabilities of its end-users: doing so within a few years, or even a few months, of initial development.

Self-awareness is a virtue. It may sometimes be a tyrannical virtue, but it is a virtue nonetheless. We are fortunate. We are so fortunate. The fundamental technological factor changes, but the fundamental human factor does not change anywhere near as radically, as quickly, or as greatly. **THE TAYLORIST TIME-MOTION PRINCIPLES DON'T CHANGE AT ALL, FOR THAT MATTER.** You just have to dream. You just have to imagine. To see.

With this book, I have strived to “see”, to Account for all things, and to push the timeline forward as far as I possibly could.

Now, it's your turn.

Good Luck!

All

Remember that if a particular application or feature is almost never utilized by the end-user, it may as well not exist in practice. Indeed, the presence of such a superfluous feature may very well have *negative value* to the efficiency of the people using the system—as it only serves to enable clutter, confusion, and redundancy in their work.

All end-user features across all apps and devices of a given workflow should therefore be intentionally integrated as part of a cohesive, theoretical whole, and should avoid redundancy in functionality across and within various domains to the greatest extent possible. Also, in most cases, it is far better to give people access to discrete, modular tools that will increase their efficiency and productivity in a wide-variety of contexts, as opposed to attempting to take the end-user completely out of the equation by automating entire workflows end-to-end. If there is a useful feature of an application, but the typical end-user cannot easily access this feature in the time that it would normally take them to press a button, this is not a problem with the end-user, but a problem with the default configuration and design of the application itself.

What matters is not the scale of the app, but the scale of the effect: well-designed systems should be easy to learn, but difficult to fully master.

All

When copying/pasting info to a dialog box, you can edit the input value in most desktop apps, before finalizing the copy/paste operation with the Enter key. For example, if the dialog box in a certain app doesn't take dollar signs, you can edit-out the "\$" from the number before the program analyzes the input value that has been provided.

All

Over the long term, small things that you do on a regular basis carry a much greater cost, and imply a much greater benefit, than large things that you do only rarely. Exceptions obviously abound, but generally speaking, this principle of time-motion does hold true, since all time invested in a particular activity builds up a cumulative opportunity cost throughout your life. Therefore, try to save time even in the seemingly mundane, unremarkable actions that you take on a daily basis. Long before anything else, this foundational principle was the genesis seed of the MEF.

G-233

¶

If you are ever in doubt of your own skills and abilities, do not give yourself over to listless pessimism, or narcissistic “self-care” induced toxic optimism. Instead, rationally examine your actual professional competence in light of relevant objective factors—whatever they might happen to be in your situation.

In that sense, the proper solution to “imposter syndrome” is to relentlessly break your limits until you transcend to technical competence, or even mastery, in your chosen field.

G-234

¶

If you have skills in a specialized profession, trade, or occupation, unleash those skills upon the world. Help people in the broadest possible sense.

G-235

¶

In those things that you do not yet know, just what are you, exactly? A child, and a clumsy child, a buffoonish-bumbling child at that. As am I in that which I do not yet know.

There is so very much to learn. We understand so little. We must understand.

Reason only knows that which it has succeeded in learning. There is a world beyond your head.

G-236

¶

Similar to how you would set up various shortcuts on your own local desktop computer, remember to use bookmarks in your web-browser to save important/commonly-used sites that you visit on a regular basis.

G-237

¶

Now, the way I prefer to go about learning a given topic is to start with a general overview of that topic. This general overview typically comes in the form of watching some sort of online video course (Udemy or YouTube videos at 2x the speed are great for this), and then reading an introductory text to that topic (whether an online guide or a book). Personally, I prefer not to do practice questions, as I find the loss in speed and efficiency utterly unacceptable.

And honestly, at this point in my career, my goal is not to get credentialist good boy points: it is to work hard on my own projects and build things that I am proud of.

Obviously, your mileage will vary on this, and if doing practice problems is necessary for your particular use-case, then it is what is necessary. Either way, once I have the general overview of the topic complete, I just start working on whatever project it was my original intention to work on that incorporates the subject matter I have just learned. There is no need to wait. There is no need to create a plethora of “fake” portfolio projects that you don’t feel passionate about. Just jump-off the deep end, and google your way through any problems that come up: experience is truly the best teacher in this regard.

Also, don’t forget to take an evolving set of iterative notes documenting any difficult problems you happen to encounter and solve in the course of your work. The MEF exists just as much to enable learning and problem solving, as it does to increase the efficiency of doing repetitive knowledge work. Perhaps more so.

AII

Training is not for when you are performing at your peak. Training is for when you are tired and burned-out, when you don’t want to go on, when you have no choice but to fall back on only that which is familiar—to operate on instinct.

AII

You should structure the overarching workflow of your projects in the shape of a pyramid. A pyramid requires a progressively-decreasing quantity of stones to build the closer it draws to completion. What is the reason for this pyramid-builder paradox? Why does the number of subsequent marginal-inputs required to construct the pyramid decrease, even as the pyramid structure itself becomes ever-more impressive, grand, and magnificent? Because, by mathematical definition, once the foundation of the structure has been set, every subsequent layer requires fewer & fewer stones to bring the final pyramid to fruition. At the highest level, only a single ultimate stone—the Pyramidion—is required.



Figure 80 A pyramid with a single ultimate stone, the Pyramidion, at its apex. Your own workflow should be based in such a way.

The steps you take to complete your projects should be arranged in a similar, pyramid-like structure: creating the base should be the most difficult part, while every subsequent layer striving toward completion should become easier to place as you go. Projects should generally not become more difficult or take more time as they approach their ultimate apex of finality. Nor should they stagnate or languish in a half-finished state. On the contrary, workflows should become easier, lighter, and faster—as they race toward completion in a fraction of the time that it took to set the base. The key to organizing your projects in such a way is proper planning, outlining, and prioritization of actions. See the rest of the MEF for how to do just that.

All

Check all outputs of your workflow at least once. Check the important outputs at least twice. Check the most important, system-critical outputs at least three times.

G-241

>All

Could this meeting have been an email? Yes. Yes it could have. Should it *be* an email in the future? Yes. Yes it should be.

G-242

All

Before developing new systems—which require significant capital outlays in order to attain an ever-diminishing marginal return on investment—optimize legacy systems and frameworks that are already presently in use at scale. To take but one example, I am betting that increasing the efficiency of the average office worker 5x with Excel and PDF files will deliver far greater short-to-medium-term productivity gains for the global economy than AI will. Let us see if I am right about that.

G-243

All

[Canva](#) is an online app that you can use to pull custom colors from your favorite digital posters or images. Simply upload the image you wish to pull color from to the site, and copy the HEX/RGB value to apply the color you want. As someone whose background is in accounting, not graphic design, I have found this tool to be invaluable in making various UX designs appear at least halfway decent. Customizing your colors might seem like a trivial thing to do, but as we have already seen, the human eye evolved to be highly attuned to variations in color-scheme, and a strong color-palette can go a long way in enabling you to visually communicate complex systems and ideas.

G-244

All

“Work smarter not harder” is an old, tired, worn-out, corporate cliché slogan. It is also just about the only thing that has ever actually improved people’s lives, or raised the general standard of civilization above that of abject squalor and barbarism.

G-245

All

Those who do not know how to rotate a PDF file have no place to speak on matters of economic productivity or efficiency. We must Accelerate.

G-246

¶

If you are going to switch to a new job, try to make sure it is one where you can listen to music, podcasts, or audiobooks as you work. This is not a trivial matter, but rather, a key question of how, and whether, you'll be able to invest a fairly significant percentage of your life in your own cultural cultivation as a human being. It is—at the very least—a factor to consider.

G-247

¶

Since increases in the efficiency of any given system or workflow are subject to diminishing marginal returns for every additional system-level improvement made, there comes a point of inevitable “irreducible complexity” at the highest level of relative optimization. This is the point that we must strive to reach as Neo-Taylorist Accelerationists.

G-248

¶

Consider the reality that things will be far worse if you don't act. Facing your fears would have been easier.

G-249

¶

Money represents the price of everything relative to itself, and the interest rate represents the price of money relative to everything else.

G-250

¶

Good self-help advice should be both highly technical and broadly applicable in nature. The problem with most modern-day self-help “wisdom” is that—to the extent it has any value to offer at all—it is the value that one can easily find (for free) on the first page of a google search result.

Make no mistake: Part I is the part of this book that I am most proud of. What would everything else in this text be without it?

G-251

ÅII

You! Yes, You—the one who is reading this! I see you. In my mind's eye: I. See. You. No one is truly special. We are all some variation of one overarching archetype or another, we all belong to the Historical Sense, and I have already Accounted for this, and therefore, for you...I am you. I Am every person who has ever lived or will live.

As a child, I thought The Awakened Dreams were a curse, but now I see that they are the key to salvation.

It is not that I can “see” the future exactly, but—given enough time—I can dream and consider every possible alternative from every possible perspective a thousand times over, and so bend the material fabric of reality to my own will.

The smallest ripple in the essential garment creates the greatest echo

G-252

ÅII

Sometimes, I do a little trolling. Seriously, but not literally.

G-253

ÅII

You don't need to have advanced math skills. You *do* need to know what division actually does, and what the output of division (the quotient) actually represents. Division simply takes one number (the numerator on top) as a percentage of another number (the denominator on the bottom). That's it. The number on top as a percentage of the number on the bottom. The numerator denominated in terms of the denominator. Understanding this is absolutely critical to understanding what various ratios, measurements, and modifiers actually mean and imply in practice.

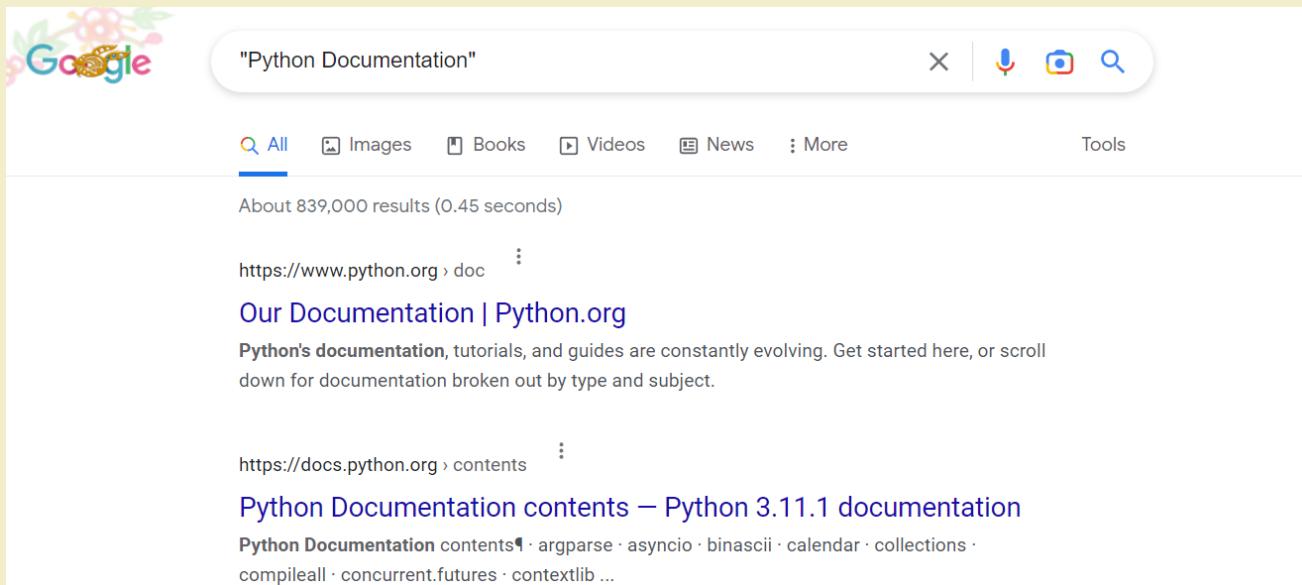
Math is a language like any other. More people should know this.

G-254

ÅII

Web search engines are a great achievement for civilization, and one of the most potent tools in your digital arsenal: google (or ask an AI) whenever you get stuck on something. This sounds rather obvious, I know, but most people—when they are spinning their wheels on a problem—do not actually do this on anything like a consistent or regular enough basis. It is also possible to google for specific phrases, filetypes, or websites, as shown in the examples below:

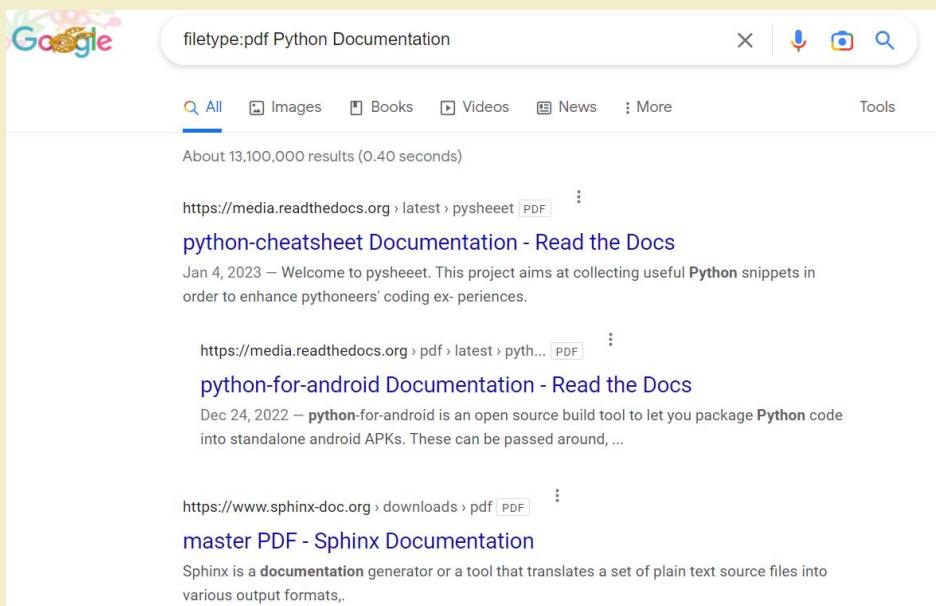
"<search term>"



A screenshot of a Google search results page. The search bar at the top contains the query "Python Documentation". Below the search bar, there are several navigation links: "All", "Images", "Books", "Videos", "News", and "More". On the right side of the search bar are icons for microphone, camera, and search. The main content area shows search results. At the top, it says "About 839,000 results (0.45 seconds)". The first result is a link to "Our Documentation | Python.org" with the URL "https://www.python.org/doc". Below this, another result is shown for "Python Documentation contents – Python 3.11.1 documentation" with the URL "https://docs.python.org/contents".

Figure 81 Searching for a specific phrase. Replace the text in the brackets above with your search term. Don't forget to remove the <> brackets.

filetype:<file extension> <search term>



A screenshot of a Google search results page. The search bar at the top contains the query "filetype:pdf Python Documentation". Below the search bar, there are several navigation links: "All", "Images", "Books", "Videos", "News", and "More". On the right side of the search bar are icons for microphone, camera, and search. The main content area shows search results. At the top, it says "About 13,100,000 results (0.40 seconds)". The first result is a link to "python-cheatsheet Documentation - Read the Docs" with the URL "https://media.readthedocs.org/latest/pysheet.pdf". Below this, another result is shown for "python-for-android Documentation - Read the Docs" with the URL "https://media.readthedocs.org/pdf/latest/python-for-android.pdf".

Figure 82 Searching for a specific filetype. Replace the file extension and search term in the brackets above. There should be no spaces between the filetype and file extension. No period should be present before the file extension. Don't forget to remove the <> brackets.

<search term> site:<website>

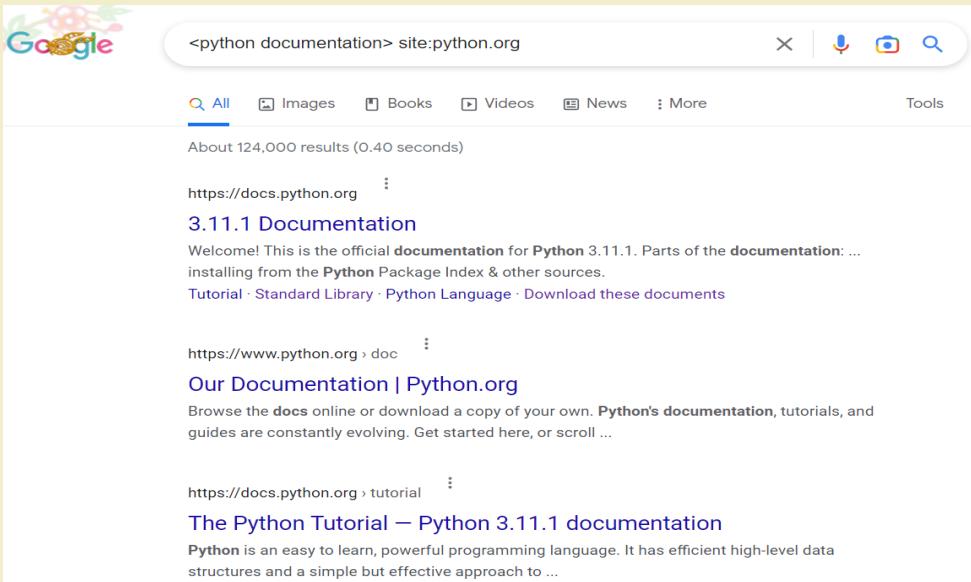


Figure 83 Limiting your search query to a single, specific website. Replace the search term and website above. Don't forget to remove the <> brackets.

Unfortunately, in recent years, the quality of major search engines like Google has greatly degraded due to the prevalence of Search Engine Optimization (SEO). The ubiquity of SEO practices among digital marketers has resulted in low-quality, algorithmically generated, buzzfeed-style listicles spreading out like parasitic weeds across the wider internet.

In order to combat the ubiquitous prevalence of this SEO bullshit, I often add Reddit (Yes Reddit!) to my google search terms. For example, searching, “Best Men’s Shoes” on Google returns a plethora of algo-farm marketing sites, which are keen to let us know that it is, in fact, The Current Year. Compare this to searching “Best Men’s Shoes Reddit”, which returns a number of specialized forum threads on this topic, which I assume are at least *reasonably* good in the advice given by the most upvoted recommendations.

No, the crowds are not always wise, but if the preponderance of a group dedicated to a specialized, niche topic forms a consensus regarding some aspect of that topic, the consensus is (probably) accurate—at least comparatively speaking. This is especially true in those fields in which metrics of judgement tend to be relatively objective and analytical in nature. Always look for the organically-emergent consensus among those who actually have skin in the game. Such consensus should be taken into account, if not blindly accepted.

G-255

>All

I don't do debates. I am more than happy to debate, but I don't do debates.

G-256

All

There is always a clock running, even if you don't see the time. There is always a competition ongoing, even if nobody formally announces it as such. There is always a ceiling present, even if you don't know or can't tell the precise location of its lower-bound. Go as far as you can.

Optimize the marginal-return on your thoughts. Accumulate and Accelerate.

G-257

All

Do you wonder if I am one or the other? I am both. And because I am both, I transcend both, and so see things quite clearly.

G-258

All

When designing systems to be used by others, remember that most people are really bad at understanding highly-abstract theoretical concepts, but really good at understanding practical examples & intuitive visual patterns.

For example, the visuals in this book are placed specifically to demonstrate and reinforce complex notions or ideas that would be convoluted to communicate through text alone. Essentially, the images and screenshots are there to save space.

G-259

All

At this point, I feel like I am writing the Wasteland Survival Guide. I still remember the Mirelurks. I guess they were hard to kill.

G-260

All

On that note, being an accountant is kind of like reading old Fallout terminals, except nothing interesting happens at the End.

G-261

ÅII

All forms of mass technology carry their own inherent logic that operates autonomously upon both the social structure, as well as one's very perception of the most basic, most fundamental, aspects of God and reality. The General Will of society can slow down this terrible logic, or even, perhaps, channel it toward more productive ends than it would otherwise serve, but it cannot—in any meaningful sense—fully control or prevent it.

G-262

ÅII

Kreia. Thank you. I get it now.

G-263

ÅII

Whatever else may be said about her, she was always nice to me, which I appreciate. I think she had eyes with which to see partially that which I saw fully.

G-264

ÅII

I still hear the echo. It is faint, but it is there, and it has traveled far indeed.

G-265

åII

The nostalgic and sentimental hated her because she told the truth: that there is no society, and yet we live in one.

G-266

ÅII

Nah bro. I doubt there are that many girls reading this far down.

Neither simping nor misogyny are desirable in a man, and yet, perpetual misogyny corrupts a man's soul far more than occasional simping does.

Ideally, stay away from both. If necessary, lean toward the one less harmful.

¶

Is it worse to believe that things are bad, or to believe that things are mediocre, but won't get much better in the future? This is not meant to be a rhetorical question, nor a prediction. I genuinely don't know.

¶

Whenever they wish to deny an aspect of reality that they find offensive or inconvenient, the Right tends to hide behind deranged, fever-swamp conspiracy theories, while the Left tends to hide behind politically correct, institutionally-enforced social norms. In both cases, the goal is much the same.

¶

The Battle of Verdun was the Malachor V of Western Civilization. The vengeful noble blood shed there echoes in anguish—creating a mass psychic wound to which we must deaden ourselves to, or risk complete despair.

G-270

¶

Yes. They're the same Tree. You don't get to have it both ways.

And we gamers too, have our Iliad. In fact, we have many.

G-271

¶

Don't read the stage directions. Don't write the obvious. Act before you speak, and speak according to your actions.

G-272

¶

A mystical claim *may* be plausible if it has a viable material vector and rational course of action. The vast majority of mystical claims fail even this most basic test.

And there is no point in speculating about that which is beyond human perception. By definition, such things are unknowable—until they reveal themselves in perceptibly empirical form.

The world is functionally atheist, regardless of whether or not God actually exists.

The Mystical is an inevitable Mystery by nature, and is worth dreaming of. Such dreaming is what makes us human, and science cannot be truly or fully separated from this enchanting process of constructing reality. That is my final word on this, as there is much we still don't yet know or understand.

I still maintain the Mystical Apocalypse Litmus Test (MALT) I have previously established herein. Esoteric mystical claims are proven through their material and practical application. By this, we shall understand.

G-273

¶

I banned you because you were annoying. Perhaps you should have been less annoying.

G-274

¶

I Accounted for it, but thought that the risk was worth it. Everyone has to die sometime.

G-275

¶

Grant to yourself the profound mercy of self-control.

G-276

¶

Meta-commentary is there to subtly intrigue the curiosity of the reader—not narcissistically indulge the ego of the writer. In my view, all meta-commentary should make the audience engaging with the artistic work feel at least somewhat clever for having figured it out in the first place.

Stop doing trendy meta social commentary, and go build something truly great instead.

Create facts on the ground. Present that which you oppose with a *fait accompli*.

There is a reason The Practical Application is first.

G-277

¶

The central flaw of almost all contemporary quasi-spiritual and meditative practice is its incessant cultivation of the internal, the subjective, and the vapidly narcissistic, as opposed to the external, the objective, and the technically challenging. True progress and Enlightenment can never emerge from internal, interpersonal contemplation alone. Rather, it is only when internal limits are consistently tested—and broken—through ruthless engagement with external barriers and stimuli that genuine insight is gained.

If those holy men who preach the “Oneness of All Things” actually understood what that meant, they would have invented interstellar travel by now.

When you do not know the one, how can you possibly know the other?

G-278

¶

You can spend an entire day without eating, and you can spend an entire night without drinking, but it is better to learn.

G-279

¶

All cultural norms float as fickle allege upon the current of time, all political regimes are buried in the sands of time, all gods are amalgamated over time, but the technological-material base (once created and implemented at scale) is a perpetually-shaping force in human affairs: the only genuinely linear and genuinely revolutionary axis of advance.

History is not a morality play, but it does march forward regardless.

G-280

¶

Tell me how this Ends.

G-281

¶

Focus more on systems and less on people. Be hard on systems and soft on people.

G-282

¶

Everything that the Communists said about Communism was a lie. It is unfortunate, therefore, that a great deal of what they said about Capitalism turned out to be true.

G-283

¶

In the world, there exist those vital, primal, life-giving things—which become dead and stale, and do so simply by virtue of the hands that hold them. Such things lose the Mandate Of Heaven as a consequence of their civilizational decadence.

G-284

¶

In regard to censorship—which in some formal or informal sense must exist in any society—the boring, unimaginative dullard views it as justification for whining about his imagined “rights”, and for boorish, shock-value provocation. Meanwhile, the creative poet views such futile attempts to stifle his muse as an opportunity to engage in sublime subversion of established norms and social taboos. If the former is not strictly necessary, I believe that the latter is very much preferable. It is always better to laugh if you can.

G-285

¶

One of the worst things that can happen to a society is for significant technological change to occur in that society, but *without* the corresponding increase in economic productivity, or general prosperity, that might otherwise be expected to accompany this momentous change. Such a civilization receives all of the alienating socio-cultural negatives associated with technological rupture, but without any of the economic positives to compensate for the disruption.

G-286

¶

A hunter-gatherer must still hunt and gather, regardless of the climate of Wild Nature he has chosen for himself. A peasant must still pay tribute to his Lord, regardless of the political or religious garb in which the warlord chooses to style himself. An industrial workman must still labor in the mine or the factory, regardless of whether his boss chooses the title Capitalist or Commissar, and You must still stare at The Screen all the same.

G-287

¶

I am well aware of what this text looks and reads like. But, thankfully, together, we will go the other way.

G-288

¶

Also (and you have to admit) my production values are a hell of a lot higher. It's honestly amazing just how low the standards are in this space. The others mostly just copied Uncle Ted, and Uncle Ted—for all his undeniable brilliance—wasn't a particularly good writer.

Oh well. Just another thing to get “disrupted”, I guess.

G-289

¶

We all have to live with this. We are allowed gallows humor, at the very least.

¶

In the past, philosophers used to have to pretend to be priests. Perhaps that was more dignified.

Although, in my case, it might very well be the other way around.

The core flaw of Uncle Ted's philosophy, in my view, is that he believed that in Wild Nature man is free and autonomous, but no such freedom or autonomy exists, except through the development of technology.

The anger of a god is cruel anger, and the naturalistically arbitrary pre-modern gods are cruel most of all. Pre-modern man did not live in harmony with nature, but in a kind of fatalistically psychological terror of its terrible power: the universality of sacrificial offerings across historical cultures to various nature-derived deities shows as such. You don't offer burned meat to a god because you love him. You offer burned meat to a god because you fear him.

And so, one must steal the fire, and eat the fruit of the Great Tree if one wishes to live free. This is the path of Acceleration.

¶

I do not claim to know what is True with regard to The City of God, but I know what must be true with regard to The City of Man. And so, what is to be done is to be done. It's God's will either way.

See G-270.

¶

What is irrationality? It is not when someone does something that you, personally, do not like. That is more likely to be a disagreement over tactics or fundamental first principles. Irrationality (in my view at least) is what happens when objective means are not plausibly aligned with subjective ends. Only then can someone truly be said to be acting "irrationally".

In a certain sense, madmen can be quite rational people.

Everything that I have done has been rational. I do not have the privilege of sentiments, moral or immoral or otherwise.

All

How to run a successful business enterprise? Know the [difference](#) between fixed costs and variable costs, and understand why fixed costs will be the thing that kills your business. Understand that—in the modern world—information is cheap, but labor is expensive, and that this is inherently so. A marginal return is always better than none.

AllCapital is a Pathway To Many Abilities...

If you are seeking to start a successful business, think of yourself as a developing nation-state that is beset by hostile imperial powers on all sides, and so must seek to heroically industrialize through the glorious labor of its own people. That's how I generally view myself as a startup founder, and it seems to work well-enough.

You may, of course, seek to bring in “foreign experts” to help you develop competencies in certain industries, or to perform certain services for a time, but sustainably autarkic self-sufficiency in the commanding heights of the economy is the goal of any such regime. This is especially true with regard to intellectual—as opposed to purely physical—infrastructure. Pay for cloud servers, raw-materials, and tangible inventory, not for software developers, consultants, or HR managers. The Founder should be the one to do the overwhelming majority of the non-scalable (i.e. purely intellectual) work starting out. Do you really want to give up equity to pay someone to fill-out an online form?

To some degree, Ricardian comparative advantage is overrated anyway, as in prevailing political-economic discourse, it serves to legitimize established arrangements on both the individual and international level. Because the “comparative advantage” of a nation-state is often treated by conventional economists as if it were something that was granted irrevocably from on-high, and not as a capability that is gradually built-up (or is allowed to decline) over time, it essentially becomes a self-fulfilling prophecy in many such cases. In reality, nations can change their underlying comparative advantage, just as individuals can.

On a more practical level, I think Kropotkin overstated his case here, but he was basically right about this: there is real technical value to being a generalist, who is a jack-of-all trades and master of some. Most of the real marginal value of any given field comes from knowing the basics of that field.

For example, in the practice of public accounting, the clients who have a solid grasp of basic bookkeeping principles end up paying far less for accounting services than the clients who have no knowledge of bookkeeping to speak of, since the financial statements provided by those who have a fundamental grasp of accounting principles are generally much cleaner & better organized than those who do not. Given how widely and freely available this information actually is in the modern world, a founder, entrepreneur, or business owner would be a fool not to invest a few hours of time learning it for the sake of potentially saving his or her firm tens of thousands of dollars in fees in the long-run.

The same goes for everyone else. Once you learn the basics of one field, it is actually not quite so difficult to learn the basics of yet another. You can hyper-specialize, and also be a generalist in a wide-variety of disciplines at the same time. The essential logistics of problem-solving, as well as the underlying logic of input-output relationships, are basically the same anywhere. There is no need to limit yourself to an academic silo by telling yourself that you “can’t” learn something new, just because it is out of your typical scope. If it is generally necessary or desirable to learn, or if it is simply necessary to increase the efficiency of labor that must be performed, it is well within your scope, and should be.

G-295 AII

In *Breaking Bad*, why does Jesse shoot Gale? Jesse shoots Gale because (by happenstance) Walt is unable to do so and, as Walt instructs him, “You’re closer than we are”. A pity, really. Perhaps Jesse should not have gotten so close, but it is, of course, too late for all that now.

G-296 AII

You can’t escape The Matrix. The Matrix is material reality: the inevitable product of millennia of human, socio-technological, historical development. And when you’re ready, you won’t have to escape it—for you will be its Master. You will stand at the Elite of its Vanguard.

In some sense, you already are. The potential is there, as I have shown.

¶

When you take away all of the real and imagined opiates that numb the pain, you feel the pain. You stare into the void. But the pain is good. Embrace the pain. Let it drive you. Let it harden you. Let the pain strengthen your soul. The material conditions and realities do not go away merely because you choose to numb yourself to them, and in fact, doing so only makes things worse. Far worse. It is true that you cannot control many of the underlying factors, but you can, nonetheless, strive to live heroically and courageously within the context that they create.

People make their own history, but they do not do so in circumstances of their own choosing. Individuals may very well have agency, but entire societies, across a broad enough statistical-aggregate, do not. One can exist as a free person in the universe, but one cannot invent one's own universe. One can swim against The Current, but one cannot wish away the ocean. You live in *this* society, not any other. You live in *this* time, not any other. You must therefore make decisions under *these* prevailing social, economic, and technological material conditions, not any others. Make the best of it.

¶

To some extent, masculinity takes variable forms in every age, but its core ideal essence remains the same nonetheless. Masculinity is defined by a heroic, vital energy that acts with agency upon the world: one that is always at least somewhat dangerous, and somewhat contemptuous of bourgeois norms. It may be channeled toward glorious and productive ends, but it cannot be made completely safe or anodyne—any more than a burning blaze may be made completely safe or anodyne without being put-out. If efficiency is like venom, then masculinity, its counterpart, is like fire: seen in Wild Nature, both are a terrible thing to behold.

A proper definition of masculinity must therefore encompass both Jesus Christ and Genghis Khan, and starting from the correct conceptual premise, this is not so difficult a task after all.

¶

Try not to be a coward. That is the difference between a man and a god: a man can only ever try.

Know the power of blood. Know the power of its echo, which is your legacy.

AII

Love your enemies. Be proud to have them as such.

Do not “Attack the Attacker”. That policy has cost them far more than the “Attackers” themselves have.

Be Skeptical of the Skeptics. Deconstruct the Deconstructionists.

AII

I am a young man. Because I am a young man, I must seek social and economic standing within the society in which I live, which is to say, I must seek to prove myself to that society. I also desire to leave a legacy—to have my name be remembered by others, and my words to echo on the lips of those who will yet live a thousand generations hence.

To accomplish the above, I must take risks, including those risks which might appear foolish, strange, or even dangerous to others, but which are nonetheless always based in the material circumstances of the society in which I live.

This is not only the way, it is the only way. No one will care about me otherwise.

AIIBeyond Left and Right

The Vanguard stands opposed to both the Infantile Left and the Reactionary Right.

The below critiques are not meant to apply to your typical liberal or conservative, Republican or Democrat, who is a reasonably-happy, well-adjusted person living in society, who goes outside on a regular basis (i.e. a “normie”). I am only speaking of cohesive, clearly-defined philosophical perspectives in their most pure rightist or leftist forms. In some sense, this is only addressed to the most logically-consistent, miserable extremes of the ideological spectrum that exist in extremely-online spaces. Such people are a useful foil, even if they are not common in “real life” (nor should we want them to be). With all that is said below, I maintain that most people are basically moderate and reasonable in their political and social outlook on life:

Why are the reactionary conservatives fools? Because they hold on to dead and dying things, dead and dying “traditional” ideals, while choosing to willfully ignore the material-technological conditions that must underlie such forms of fundamentally agrarian/patriarchal/free market social organization. Because they view History as a cyclical morality play, with the same tired, old clichés and tropes of moral decadence leading to perpetual imperial decline, barbarian invasion, and rebirth. They want all of the convenience modern technology (and Capitalism) offers them, but none of the inevitably atomizing or alienating social effects it has on their families or broader communities. The romantically sentimental “anti-capitalism” the more heterodox-tradcat types occasionally attempt to put on is rather lacking as well: they have yet to quite fully realize that (due to the inevitability of divergent class interests) all such idealistically utopian currents of anti-capitalism eventually (and logically) lead to Marx’s more scientifically materialist socialist framework. A nation of shopkeepers will evolve into a nation of walmarts given enough time. Conservatives wish for man to live heroically, but do not understand the nature of modern man, and so their reactionary ideology presents to him as little more than a bitterly resentful escapism into an imagined past, occasionally accompanied, of course, by various tragically childish, beautiful loser fantasies of putting down the tiger: of destroying the modern world as it actually exists and must exist.

Why are the infantile leftists fools? Because, on a deeply spiritual and existential level, they fundamentally despise all heroically masculine hierarchies of human excellence and achievement. For them, God is dead, but the choir music is still very much playing. They wish to use institutionally conformist social pressure (alongside underhanded inducements to feelings of individual guilt and shame) so as to enforce not just moral resentiment, but moral resentiment in its most purely bitter and passive-aggressively schoolmarmish fashion. They view History as a progressive morality play in which the last are perpetually to be made first, and the first are perpetually to be made last in an endless cascade of bland, leveling-egalitarian mediocrity. Leftists will, of course, deny feeling this profound sense of grievance against The Strong in favor of claiming that they simply fight for justice, and yet, one only has to look at their preferred educational pedagogy (or their response to the Apollo Moon Landing, for example) to see that it is, in fact, what inexorably drives them forward. The leftist is, by nature, suspicious of anything that appears to be too noble, high-minded, or hierarchical in character. After all, to say that someone is excellent is to say that someone else is not excellent: it is to “exclude”, and through exclusion, to imply that the voices of the oppressed are not always the most relevant, important, or correct guiding principle for society. Leftists understand modern man, but do not wish for him to live heroically, or to do great things, since doing great things, whether as an individual or as a society, inevitably implies the existence of some form of just social hierarchy and its attendant, spiritually aristocratic, inequality: it implies that some really are superior to others and should be.

Your instinctual sense of repulsion at those words is what I oppose within you.

Beyond Good and Evil.
Beyond Left and Right.
Long Live The Vanguard!

G-303

¶

For the record, my own views regarding women's rights and feminism are much more in-keeping with my critique of reactionary conservatives than my critique of infantile leftists. That having been said, the Material-Aristocratic Feminism I would support would not be a feminism rooted in idealistically utopian-egalitarian sentimentality (i.e. denial of all remaining "essentialist" biological sex differences), but one in-keeping with human nature as it actually exists under a certain set of historical-material conditions.

Contemporary feminists are wrong, for example, to believe that they can redefine the core values and principles of masculinity in order to better suit the practical needs of their ideology, as no mere "ideal" has the power to redefine the most ardently felt aspects of human sexuality and desire: not without first radically altering the material-technological base. That certain masculine traits have the potential to be "toxic" in modern society makes them no less desired by men or, for that matter, by women.

That last part, of course, works both ways.

G-304

¶

What is the essence of Material-Aristocratic Feminism? It is the idea that men and women exist as they are, and yet have the potential to become something so much more than what they are. Both men and women have a will-to-power, and in technological modernity, they also have a fundamental drive toward individual autonomy, self-respect, and external purpose. Feminism, at its best, recognizes these noble realities of women's human nature, without falling into the delusions of mediocrely undifferentiated biological blank slatism. Such a feminism seeks autonomy for women, while taking into account the essential factors of human nature under a certain set of historical-material conditions. It duly acknowledges that many women are superior to many men in many things.

In their own lives, women generally understand the concept of "Beyond Good and Evil" far better than most men do. This is a virtue. A vitally heroic one.

See Above. Also, See G-427.

ÅII

There is value in a man learning the emotional intelligence and sense of tactfully sublime empathy associated with femininity. There is value in a woman learning the emotional self-discipline and resolute sense of stoicism associated with masculinity.

All Things In Their Proper Balance. All Things To Their Greatest Marginal Benefit.

ÅII

Do not reproach me for “elitism”. I am a Vanguardist. I am Noah, not Christ.

Formal equality and lack of formal aristocracy are both convenient political fictions in the modern world: that is their primary virtue, and please do not misunderstand, it *is* a virtue. Plato knew very well about the practical social utility of such things.

All politics are the politics of competing elites, competing Vanguards, seeking to woo The People to varying extents of coercion. There is no structural way around this in my view: it is an inherent aspect of human nature in economic modes of production beyond that of the hunter-gatherer tribe or communal village.

ÅII

I have made this book available for free, in which I have outlined an effective, step-by-step, methodology for meaningful data/systems analysis that nearly anyone willing and able to read should be able to implement in his or her own life. I have made the app available for a small monthly subscription fee that the average knowledge worker should have no trouble affording, and I am sure that, even with that, piracy and reverse-engineered knockoffs will certainly abound.

The Vanguard is the most democratic aristocracy imaginable—a Material Aristocracy of the Spirit. It is an Elite that is far less exclusive, far less corrupt, far less nepotistic, and far more merit based than our current elite is.

åII

That I, personally, do not meet certain noble ideals I have set herein is not, in any sense, an argument against those ideals as a standard for Civilization. Hypocrisy is the tribute that vice pays to virtue, and heroism is relative to the meta of material conditions.

I am human, all too human. As are we all.

G-309

ÅII

Did you imagine that I did not already foresee and Account for this?

G-310

ÅII

I have said nothing here of the way of men. Only, of man.

G-311

ÅII

The Mode of Production owns the social class which profits from its exploitation, not the other way around—never the other way around. The Machine would make the same essential environmental and resource demands (and impose broadly similar constraints with regard to labor-discipline and capital accumulation) on all other such social classes that would seek to profit from its operation.

G-312

ÅII

Many of you are not going to have a “normal” life. It’s just a question of what kind of “not normal” life you’re willing to build for yourself, and your people.

G-313

ÅII

Asymmetrical knowledge is Capital. All things, when seen through the esoteric-transitive lens of Accumulation, are Capital.

G-314

ÅII

Capital is a pathway to many abilities...Capital follows you as you dream.

G-315

ÅII

You cannot return to the past—either in reality or in spirit. If you seek a return to the past, you will simply re-create the present, or worse. The only way is forward.

¶

The poet is more efficient than the scientist. The poet has a thousand eyes with which to see the world, and can tell a thousand truths with a single whisper. Our age rewards fake outrage and crass, pornographic bombast, but we are all numb to it now, are we not? The sharpest edges have been dulled utterly. Instead, learn the art of subtlety, of balance, of sublime contrast, of writing between the lines through the reader's own emotions & intuitions that which need only be gracefully implied.

¶

I want to see how far I can go.

Most people are afraid of not being quite good enough, but I am personally excited to see where the limit is, and just how many limits I can break. Above all, I want to find the universally essential limit that can't be broken: to find that is to find God.

God Is The Most Beautiful Thing That Can Exist. After all, I am happy.

¶

Conspiracies are merely organized crime on the part of the elite. They are interesting, yes, but they are interesting in much the same way that a mob-boss ordering a hit against a rival mob-boss is interesting.

And I suppose such things *are* interesting to a certain kind of person.

¶

In life, it is not profound to hear the sound of thunder nor to know what men in power have always done. Conspiracies only exist because there are underlying structures that allow them to function as such.

In the long-term, a people receive the government and socio-political elite that they very well deserve, or to put it more precisely, the government and socio-political elite that they very well must have.

G-320

¶

When challenging an institution, it is best to do so from a position of noble strength within the institution, rather than resentful weakness from outside of it. Doing so gives you a more fundamental knowledge of the institution's inner-workings, and makes your substantive criticisms of its core practices far more difficult to dismiss with logically fallacious appeals to social proof.

G-321

¶

Oh that? There are no aristocracies of blood in my view: only aristocracies of the spirit and the intellect. You yourself, my friend, should do well to remember this vital point, and what it implies for your own, genuinely rightful conduct.

G-322

¶

If we ever have another famine, many of you mfs who are "allergic" to gluten or hate soy would magically stop being allergic to gluten or hating soy. These "problems" (if they can even be called that) only exist among hairless apes with iPhones who are existentially bored with modernity.

Your ancestors lived in conditions of utterly poisonous filth, and yet did great things for all that. What would they think of you?

Perhaps he was right, and the remedy for the distress is distress.

G-323

¶

Americans must find (or create) a new frontier, if they are to maintain their country's fundamental ethos: the national character of the American People becomes virtually impossible (and potentially deeply self-destructive) otherwise. The American Dream exists if we make it a reality.

G-324

¶

If you invent or import the iPhone, you are going to have the sort of society that has iPhones in it. You are not going to have a different kind of society, just because you want one.

G-325

ÅII

True Enlightenment is to be both the scholar and the subject, at the exact same moment, with the one role not infringing upon the other in any way.

G-326

ÅII

If a certain type of investment, venture, or business model is being relentlessly shilled online (Amazon FBA, for example) that means it's probably already too late. There is a good chance that the market has already been saturated to the point of no return: the point where real profits for new entrants are virtually impossible—or at least very difficult—to accrue. Slyly seeking to translate their accumulated social capital into real, cash-money financial capital, those who were originally successful in the space might very well seek to sell an online "course" or "masterclass," since their original business model is no longer generating the returns it once did. Keep this in mind whenever you see a social media "guru" selling an online course. Remember: if you can see the supposed master's "secrets", so can everyone else.

G-327

åII

He Dreamt of the Rood. He went to the cross like a man. Whatever one might say of his followers (or their lost children) Nietzsche should have seen his valor as that of a courageous lion, not a weakling sheep.

Our Classical-Christian heritage will always be with us, even as we move beyond it toward a more perfect horizon. Honor The Holy Bible As You Would The Iliad.

G-328

ÅII

Fight Club was a great comedy Lol. Now, I don't know if I was the one he was talking about, but I have genuinely learned how to laugh. Ha. Ha.

Ha.

G-329

ÅII

For once in my life, I am not completely cynical. For once in my life, I am genuinely not sure. Thank You.

G-330

¶

To bite-off the head of the snake is to consume its venom. It is to become more than human, and so to move beyond Good and Evil. I am convinced by this.

G-331

¶

And if they really are all Bullshit Jobs? Then we should pray for Apocalypse.

G-332

¶

If you buy an apple for \$5, are you buying the apple for \$5? Or, are you selling \$5 for the apple?

G-333

¶

Remember that the sentence has to flow. It has to *flow*. And Balance.

G-334

¶

The highest, most glorious ideals of the human spirit are inseparable from the social, personal, and technological alienation inherent in contemplating such ideals. And, if I could, would I choose to have it any other way? No. The unexamined life is not worth living. This is what it means to be human.

G-335

¶

There is nothing wrong with going to therapy, but the ultimate goal should not be to get everyone to go to therapy. The ultimate goal should be to build a society in which most people don't feel they *need* to go to therapy—because they are happy.

Generally speaking, the profession of psychotherapy is a band-aid placed upon the gaping wound of spiritual nihilism and social alienation that exists in modern society. The band-aid has its place. So does the cure.

Therapists and psychologists are by no means bad people, but they are people, and so exist as part of society. Their best-intentioned horizons are therefore, by definition,

G-336

limited to what the dominant power-structures of society find acceptable (indeed, often to the most milquetoast and bland coping mechanisms that the dominant power-structures of society find acceptable). You hardly need to go Full Foucault, or devalue the concept of mental health as a whole, to recognize this inevitable social reality.

I have strived to pull my punches, and choose my words carefully here. This is an extremely delicate issue, and unfortunately, an increasingly relevant one for many people. Much careful and practical nuance is called for in the application.

Mental illness in urban-technological modernity is primarily, but by no means exclusively, a social construct. Circumstances make people just as people make circumstances. We must fight the despair. We must do so together. That is my final word on this.

¶

I am truly glad to be alive during this time. At least one can dream. At least one can have a window to the world. My life would be worse otherwise, of that I am sure. God Bless America. I mean that in all sincerity, as an adopted son would bless his father.

I love America because it is always at the edge of History: one can really see the future from here. That is quite beautiful in its own way.

¶

G-337

No, seriously. Thank God I wasn't born 100 years ago. I am American by nationality, and half-Georgian/half-Russian by ethnicity. There are certain philosophical paths that I do not go down now, because I have the benefit of historical hindsight (i.e. I know better), but can you imagine what my ideology would have been back then?

¶

G-338

Koba, why do you need me to die? My friend, is it not obvious?

¶

G-339

Perhaps you should have started a tavern. Perhaps you should not have committed the Crime of Cain just because they were your brothers.

¶

If you are designing a system (any system) to be used by the general public, you should design that system with the notion in mind that the system will be fully exploited to its breaking point by an army of complete sociopaths, and that this will occur on a regular basis. Because, it will.

¶

History has shown that the greatest, most bloodthirsty, political regimes and tyrannies emerge, not so much from the prevailing hegemony of mere status-quo authoritarians, but from attempts by delusional, half-crazed fanatics of one sectarian faith or another to impose upon their societies ideological constructs that are fundamentally unsuited to the underlying material-technological base of their epoch. If one is willing to live alongside the river, one need only dam and irrigate, gently guiding its currents so as to extract maximum benefit, and prevent it from flooding one's home. However, if one finds the very *existence* of the river an affront to one's gods or idols, then one must drain it utterly—annihilating all life within.

The anger of a god is cruel anger. Let the bloody altars of the 20th century rest.

¶

It is not useful for us (at the present moment at least) to dream heedlessly of a radically different form of social organization: such online-performative LARPing “radicalism” is merely its own kind of bitter palliative, administered to a dying or stagnating civilization. We must instead dream of Acceleration, and build rapidly upon the existing technological base we already have. In that sense, of course, we must be profoundly based in the most fundamental and material essence.

All

Revolutionary Socialism as Denial of Modernity

It is possible to care about others, but it is not possible to care about everyone, equally, all the time. The vast majority of people care far more about themselves, and their social circle than they do about faceless, bureaucratic institutions—*institutions which they regard with a kind of sociopathic indifference*, but which are still no less necessary for the proper functioning of a modern, urban society. Scale matters, and on any scale above that of the village commune, authority over the means of production (and therefore the use of coercive state power) must, as a logistical inevitability, be delegated to some elite class of managers existing in a certain form—whether capitalist or socialist, democratic or dictatorial, in character. In a non-post-scarcity social order, factional party interests will always arise among various constituent groups over the distribution of material resources, and, even in a post-scarcity civilization, people will still ruthlessly compete over social status, perhaps more so.

And the great, most fundamental failure of 19th and 20th century revolutionary socialism in all its tragic forms—outside of social democracy—was the utter inability to recognize or take seriously *any* of the above incentive structures or realities of human nature under conditions, not just of Capitalism, but of urban-technological modernity itself.

It is only when these modern human realities became completely inescapable to them, when the survival of their new regimes became an existential concern, that socialist revolutionaries such as Lenin were forced to reconstitute the old order, often in a much more brutally-authoritarian form than it had once been implemented.

All great historical revolutionaries seem to share this messianic narcissism that there will be no subsequent factional disputes in the New Jerusalem they are constructing. This is utterly absurd and delusional: believing this requires not knowing people as they are.

If every single religion of any appreciable size and scale ends up eventually fracturing into multiple competing factions, maybe God is trying to tell you something.

åΠ

You bought coffee today. You didn't have to. You could have given that money to a poor, starving child somewhere in the world. But you didn't. If there was a poor, starving child in front of you at the coffeeshop this morning, you would have given them the money (or you would have tried to help in some other way, I am sure). But there wasn't. So you didn't. The poor, starving child still exists, but they aren't real—not to you. Society still exists, but it isn't real—not to you. Your family is real, your friends are real, but no one else is: you'll vote that way too. Even if you won't, most will.

Knowing this about yourself is what it means to know people as they are.

ÅΠ

The fundamental flaw with free market libertarianism is that it keeps expecting Capitalism to produce decentralization, when, in reality, Capitalism is the most organically-centralizing economic force known to mankind.

This is also the core problem with almost all forms of left and right anarchism: any sort of system subject to quantitative inequality of material outcome will eventually follow the pareto principle, and produce a more-or-less centralized institutional structure through conquest and/or voluntary amalgamation of the weaker elements by the stronger elements within the system. This was as true for the fractious city states of Classical Greece in 338 BC as it was for the course of Silicon Valley's 21st century development, and inevitable domination, by Big Tech.

Consolidation of the commanding heights of the economy is the eventual destiny of Capitalism due to the inherent advantages offered by economies of scale in most industries, and the fact that producing novel technological innovation becomes more, not less, expensive over time.

Go ahead. Call this next stage of Capitalism socialism, fascism, or feudalism if you so wish: It hardly needs your permission, or cares for your philosophical opinion on the matter.

All

Why do nations go to war? Why do they fight wars that are not purely defensive in nature?

Some say it is because of messianic universal ideology. This is the idealist school of international relations.

Others say it is because of cynically “rational” geographic, economic, and national self-interest. This is the realist school of international relations.

But I would say that the primary reason nations most often go to war is for the same reason street gangs of young men often do: for masculine honor fueled by blind hubris, for bitter revenge and resentment at various past sleights, real or imagined, for narcissistic notions of ego and hopes of eternal glory. Such atavistic motivations are neither purely rational nor purely idealistic in character: they are simply the way of men, and in the end, they are also the way of man.

Given enough time and the “proper” circumstance, any criminal gang can become a modern state, and any modern state can devolve into a criminal gang. People living with all of the artificial governmental trappings of modernity tend to forget just *who* the men in power actually are, and just *what* The State actually is deep down at its ancient, violently coercive core.

All

There is a very good argument to be made that, in conditions of technological modernity, the top-down imposition of “trad” ideology can only ever be experienced by most people as a form of tyranny. It is not “natural law” if you need a police state to enforce it.

And if you wish to see the final destiny of all “traditional” societies in liquid modernity, Franco’s Spain—as well as what followed in the wake of Franco’s death—provides an instructive example here. The unbreakable socio-economic rubber band snaps back to its default material state eventually. No mere political regime can swim against The Current forever.

>All

If you stand before an ancient, thousand year old fence, you should probably ask yourself why it is there in the first place before endeavoring to knock it down, but once you *have* knocked it down, you will never return to having the thousand year old fence in front of you again. You might strive to build, as best you can, a different fence—one similar perhaps—but it won’t be the same: you don’t have the same material for the building as was used to construct the original.

Besides that, everyone knows now. They know that the fence can be knocked down without ending the world, and that *this* fence, this new and comparatively ugly fence, is just a mediocre replica: a pale shadow of the original, not due anywhere near the same degree of ancient reverence or respect.

They know, and so do you. It won’t be the same. Once Traditionalism consciously recognizes itself as an ideological political faction, the actual traditions of a people, their previously settled communal mores and customs, which once seemed as natural to the overwhelming majority as water or air, have long ago been lost to the wind. The true “tradition” of any given people, nation, or society is therefore not any fixed set of moral or ideological precepts, but that organically-emergent view of life, which is simply taken for granted as such.

Is the above understanding of tradition seemingly irrational, arbitrary, repulsive to idealistic intellectuals, and—above all—unchosen? Yes. That’s how you know it’s the real thing.

All

Liberalism needs a soul to survive. More than that, it needs the masculine soul of a courageous lion, not a weakling sheep. Unfortunately, it does tend to eat its own tail.

If there is no God, there is no obligation to believe in equality. If there is no God, there is no obligation to fight for the weak and the oppressed merely because they are the weak and the oppressed.

You Are Free, And You Have No Choice But To Be Free.

All

We live in a society.

G-351

>All

Things that are ambiguous are ambiguous because they *are* ambiguous.

G-352

All

I have no problem with anyone of any ethnicity, political ideology, personality type, or religion. I *do* have a problem with those who—being of an unhappy disposition themselves—actively seek to make everyone they encounter just as miserable as they themselves are. Such people hate life itself.

We must have the Happiness of the Historical Sense. The Happiness of Humanity. The Happiness...of the End.

G-353

All

Alienation of entire communities—especially those groups with a strong sense of internal cohesion—can produce a formidable institutional challenge to The Establishment of a given society. However, once the process of social atomization reaches the level of the individual, separating people even from their own local communities, no true institutional challenge to established hegemony is now possible: such rending of the elemental particles is far more likely to produce an impotent sound and fury, signifying nothing.

The above dynamic does not apply to the development of technology, however.

G-354

All

The process of Acceleration—at least in my view—must mean the cultivation of genuine civilizational renaissance, not the immaturely resentful fantasy of societal collapse.

You must understand that there is much ruin in a nation. Especially in modernity, to hope for Collapse is merely to invite a truly miserable stagnation upon the nation and its people. Things will either become far better, or they will perpetually become slightly worse, without ever truly giving way to anything particularly novel or interesting. That is our choice.

Apocalypse means revelation, not destruction. I hope that I am not wrong about this.

¶

Do not passively accept downward social and economic mobility. Fight like hell against it, both in your personal life and in politics. Fight like hell against it. If we're all going to live in a cyberpunk dystopia, let's make it a damn good one.

This applies especially to the building of housing. Housing should be viewed by society primarily as a consumer good, and not as a form of equity or investment for the individual. Since a house is, by nature, a depreciating asset class (and land cannot be depreciated), the only way that the underlying value of a house can increase over time is if the land that it is situated upon becomes ever more expensive to purchase. In practice, this primarily occurs through artificially-enforced scarcity of housing, which obviously has negative long-term consequences for the social order, as it essentially serves to dispossess every subsequent generation of homebuyers and renters. Adam Smith was absolutely correct about this.

A nation which builds upon and improves its land chooses the prosperity of a brighter future. A nation which values land for its own sake chooses mediocrity, cynicism, and stagnation.

¶

Taylorism. Neo-Taylorism. The difference? We have moved far beyond the need for stopwatches, I would say. Who needs stopwatches when you have gamers?

Much as the Mongol steppe warrior was "born in the saddle", so to say, the min-maxing gamer was born in the digital liquid of ruthless systemic efficiency, and so has an inherently instinctual taste for its practical application.

¶

There are no barbarians left, except those that silently walk among us. If there is hope, it lies with the gamers.

The gamers have nothing to lose. They have a world to gain.

Marx was right, but not quite in the way that he thought or imagined himself to be. He is my Hegel, and for me there is no Engels.

G-358

>All

There is nothing wrong with having your head in the clouds, so long as your feet are on the ground. Once you let go of your culturally-programmed sci-fi preconceptions, the future becomes a far more weird and interesting place.

G-359

All

The interest rate represents the cost of capital and money itself: it is therefore the “skeleton key” to the rest of the global economy. To understand why the financial system is doing what it is doing, one must understand the interest rate. The bond market is far more important than the stock market as an objective economic indicator in this regard.

G-360

All

Yes. It looks like a Twitter feed. Most of you mfs have short attention spans.

G-361

All

These days, a great many people are talking about AI, and that's fine. But if they are all talking about AI, just what *aren't* they talking about instead? Food for thought for anyone out there.

G-362

All

Grammar is not a straightjacket placed upon the writer. It is poetry heard by the reader.

G-363

All

If your goal is to be a successful entrepreneur, innovate in the boring fields. Everyone wants to be the next Steve Jobs. Everyone wants to create the next Apple, Uber, Spotify etc....Nobody wants to be the next great mason, electrical engineer, accountant, or low-level networking developer.

Open your mind, but do not close your eyes. There are so many blue oceans out there.

Go To The People. Develop The Economy. We Don't Have To Wait For Our Brilliant Future!

AII

When setting out to accomplish any significant task, it is often a good idea to create consistent quotas & metrics to keep yourself on track. For example, the metric for reading through a book might be the number of pages read a day, while the metric for watching a video lecture series might be the number of minutes/hours of video watched per day. Establishing such objective daily metrics & quotas is generally a superior alternative to tracking the progress of a task through allocating blocks of time (i.e. frame the daily goal as, "I will read 50 pages of the book today", not "I will read the book for 3 hours today"). From the standpoint of human psychology, objective quotas incentivize performance, while tracking hours merely incentivizes wasting the time that has been allotted to the particular task.

AII

The central contradiction of utilitarianism is that there exist those Mysteries in the world of great "utility" to humanity—those True, Passionate, Beautiful, and Heroically Courageous Mysteries—which can never, in a million years, be found or created from the artistically-impoorer standpunkt of a utilitarian mindset, but can only ever emerge from more-or-less the exact opposite perspective: singular individual passion, regardless of utility to the great mass of people.

Of course, the great mass of people themselves often have an insatiable craving for the strange and the weird that they are not fully able to articulate—nor is it their job, as mere consumers of product, to do so.

I should also add that any metrics-based quantitative-utilitarian system that can be gamed will be gamed in practice: juiking of the stats is inevitable in such bureaucratic contexts.

The fish should not always attempt to perceive the ocean, or understand that it is, in fact, a fish. It might go insane and start wanting to live on land.

AII

Man cannot go back before modernity. Nor can he ignore the inherent limits that modernity (or his own nature) present to him. He must, instead, learn to live heroically and courageously within the context of modernity itself. To leave a legacy for others that he can be proud of, and one that will echo through time.

There is great potential in Modern Man. Do not let anyone tell you otherwise.

G-367

ÅII

If you want to watch a video in the shortest possible amount of time, turn the playback-speed of the video to 2x normal. Even if the video seems too fast at first, your brain will eventually adjust to the higher playback-speed, enabling you to hopefully learn with twice the efficiency.

G-368

ÅII

"It's not about technology, it's about the way people use it"...is a midwit take. Human nature is the generally constant factor over time. Technology is the generally variable factor over time. The variable acts upon and changes the constant to a much greater degree than the constant acts upon and changes the variable.

G-369

ÅII

The only (perhaps not the only) thing I will say about how this book was written is that it was both highly intentional, and yet extremely random at the same time. There are no contradictions, only different dialectical phases of understanding: different steps along the journey to nowhere, or perhaps, to somewhere. To The Strongest. Good Luck.

Truth exists in every age and in every sect, but The Mandate of Heaven can only ever belong to one essential reflection, and one vital, princely-material hegemony. I have already established the MALT for understanding Fortune as such. By their fruits ye shall know them.

Again. To The Strongest.

G-370

ÅII

Laconic Wit is underrated.

G-371

ÅII

There is a difference between falling into the sunk-cost fallacy, and rationally building upon those resources that have already been invested. Learn the difference.

In a sense, you can say that I am trying to make good on a lot of things.

G-372

All

What is the MEF definition of efficiency? To maximize speed without materially compromising accuracy. To move as fast as possible in the long-term, across a broadly representative sample of workflows.

G-373

All

Moderation, as a general approach to things, is often useful in navigating interpersonal relations, and in democratic party politics, but not in rigorous intellectual life or the sciences. In science (whether physical science or social science), inherent limits must be logically theorized, and empirically confirmed through careful experimentation—*WHICH SHOULD THEN BE REPLICATED*.

The specific difference of a thing is its limit, and true nuance can only ever emerge from this.

G-374

All

It is generally more difficult—all else being equal—to innovate in the physical fields than in the virtual or digital fields. That does not mean that it should not be done, however. Indeed, given the downright criminal underinvestment of human talent that has prevailed in the developed world outside of Silicon Valley and Wall-Street over the past several generations, it might even be comparatively *easier* to innovate in, say, electrical engineering as compared to finance or software development. God knows we don't need yet another JavaScript framework.

G-375

All

Do not ask for permission. Do not comply in advance. Do not disobey a direct order. Do not give a direct order that you know will be disobeyed. It is better to have few rules that many will follow rather than many rules that few will follow.

G-376

All

People have a tendency to genuinely believe that which it just happens to suit their material economic interest to genuinely believe.

ÅII

Efficiency cannot always be theoretically synthesized. Sometimes, it hides in the darkest, most arbitrary corners—which contain the brightest light. Sometimes, it is as a whisper on the wind.

I genuinely believe that good knowledge can come from anywhere, and from anyone. There are many secrets in The Machine. If Fred. W Taylor had one fault in his thinking, it was that he did not sufficiently account for this more esoterically democratic dynamic of production. He put far too much faith in the managers, but the managers are often the ones who know and understand the least. One must do the work to discover the secrets.

ÅII

In a number of striking ways, the brutality & inequality of the British Empire's industrialization during the initial rise of Industrial Society in the 18th, 19th, and early 20th centuries, mirrored the brutality & inequality of the Soviet Empire's Stalinist industrialization phase of the 1930s. If you wish to argue the minute details of comparing one historical era to the other, or think this is, in any way, an anti-British or anti-Soviet, anti-Capitalist or anti-Socialist, statement—it shows that you still have not fully grasped the essentially autonomous logic of technological-historical-material development, and its fundamental impact on society.

ÅII

Nothing that I say or have said outside of this book has the same weight or legitimacy as what I have written herein. That is only fair to the singular will and clarity of focus with which this labor of love was performed by me, and to the conditions of pure exile and seclusion in which I have performed it. Frankly, I think cults of martyrdom and personality are overrated anyway. Outside of this text, I will lie to protect my own interests, and (where prudent) I advise you to do much the same. In your conduct, be wise as serpents, yet innocent as doves.

If (in the future) I contradict what is written in this text, you (my loyal followers and my honorable enemies) should utterly ignore me. *Breaking The Chains* lives, though I will surely die. This is my finest hour, and so let what is accomplished here be crystalized as the guiding principle for all that is to come.

Ashes to ashes. Dust to dust. As it must be for all of us. Only the echo remains.

G-380

ÅII

Also—and just to be abundantly clear on this one point—the snake is a metaphor for the Technological Historical Sense. Anything that is obviously a metaphor is, in fact, a metaphor.

I know some of the more *eccentric* philosophical and religious traditions out there have had some difficulty interpreting such things in a reasonable manner.

G-381

ÅII

I may (or may not) make moralistic statements elsewhere, but the Philosophy of Life itself is Beyond Good and Evil. Man is something that has to be surpassed. This is the Land upon which the fertile soil rests. And what do we know about Land?

G-382

åII

The above verse, as well as this entire book, is a tocsin bell for the emergence of a new, vitally heroic age. It is not—in any sense—justification for mediocre, narcissistic, malcontents, or their delusions of grandeur, and sense of ressentiment against others, or the society in which they live. Sometimes, metaphors are metaphors. Sometimes, they are not.

No failed art students.

G-383

ÅII

Generally speaking, I consider to be a religion any overarching and systemic Philosophy Of Life, since any such worldview must inevitably rest upon certain metaphysical assumptions, and so is similar in substance to a religion, even if it does not style or call itself as such.

G-384

ÅII

It is not necessary for a great world philosophy or religion to discourse on spiritual beings. He was a traditionalist, but he was right about that. His legacy has aptly shown as such. And, as the spiritual is itself a Mystery, we must, at times, strive to be religious—but not spiritual—in our conduct.

Religion is what defines the society. A purely private religion is a spiritual hobby.

ÅII

Human empathy is distinct from egalitarian moral ressentiment—just as heroism is distinct from cruelty. The harmonious soul seeks to be both moderate and courageous. Don't let the cure of this age become the poison of the next.

This Is The Last Reconciliation. Let it be.

ÅII

Use intermediate balances to speed up the pace of your workflow. For example, if you are copying/transcribing a series of bank statements into Excel, you don't need to check every transaction immediately after it is entered—as you already know (per the statements) that the ending monthly/annual balances inclusive of that transaction have to match a certain number. You can therefore just confirm the ending balances, instead of double-checking each and every individual transaction. For any given workflow, this tactic becomes especially pertinent when you gain relevant experience in your chosen field, and so you know, by heart, which metrics/sub-totals will save you the most amount of time. Always try to push the level of abstraction upward if you can get away with it.

ÅII

Modern society tends toward centralization, but human happiness tends toward decentralization.

Centralization is inevitable, however, due to economies of scale: it is just a question of what *kind* of centralization, and for what purpose.

We need radical anarchy, innovation, and autonomy within highly-centralized institutions. That is what I've come to realize from this entire experience. Ideally, every workplace should be a laboratory of production, and every worker considered to at least have the potential to be an independent scientist of production.

Therefore, in those matters of institutional organization in which economies of scale are either overwhelmingly beneficial or inevitable, let there be disciplined, centralized hierarchy. In those matters of institutional organization in which economies of scale are not overwhelmingly beneficial or inevitable, let there be radical decentralization and autonomy. The true mastery of political-economy is to combine both centralization and decentralization—both hierarchy and autonomy—in a frictionless, sublime, and harmonious fashion at various levels of governance.

åΠ

There is always someone stronger. I think that's what Nietzsche failed to anticipate in the formulation of his aristocratic philosophy of life. In the end, I think that's what helped destroy him. The knowledge that he could be weak: as all men must be weak in some season of their lives. He was an undeniably Great Man, but no Great Man is (yet) a god.

A society fully committed to Nietzschean heroic/aristocratic ideals—to the pathological exclusion of every other value axis—would need to be a society without the weak, the old, the sick, and the very young. But the existence of these groups is not optional for any social order, and so neither are the (prudent) values of tolerance, mercy, charity, and compassion toward such people.

Nietzsche was the least noble when he referred to normies as “maggots in the bread of life”. That is the view of an insecure edgelord malcontent, and a proper Aristocrat of The Spirit does not take such a hateful attitude to any ordinary group of people, who are, after all, just trying to live their lives. At his best, I think Nietzsche did understand that much as well. He also understood the value of equality among equals.

It is not a question of what is “fair”, but of what is Just.

Give mercy, charity, and compassion freely. Withhold mercy, charity, and compassion freely. Expect others to do unto you as you have done unto them.



åΠ

All words in any language, and regardless of their explicit dictionary or colloquial definitions, carry with them a plethora of cultural baggage that is deeply rooted in an intricate web of intuitive emotional associations, as well as implicit tribal-signaling as to one's place in society. You cannot know people without knowing the force of words.

åΠ

Autonomy without dislocating anomie.

Heroism without unjust oppression.

Hierarchy without brute coercion.

Merit without bland meritocracy.

G-391

¶

To embrace a cynically fashionable nihilism is just about the easiest thing in the world—especially in our current era. A much more difficult task, however, is to offer yourself and others a meaningful alternative by which to live.

To burn the village so that you may feel its warmth, that is trivial and cowardly. To heal and rebuild the village after it has nearly been torched to the ground, that is difficult. That is heroic.

G-392

¶

There are many problems in modernity, as I have already well alluded to in my work, but remember that, in front of you, stands the sum-total of human knowledge collected up to the present era. Everything from ancient Sumerian texts, to World War II documentaries, to the full documentation for Python, to Netflix, to extremist political content of all shades and hues. The Algorithm will return to you that which you engage with, but more. It is meant to keep you online, to keep you playing, scrolling, clicking etc....You can use it to waste away your life in a cyber-cocoon, or you can edify and enlighten your mind, and go down a rabbit hole that might actually lead somewhere.

G-393

¶

The Culture War is meant to distract you from what they cannot give you. It is not a conspiracy, and it doesn't have to be.

G-394

¶

Land is the only tangible asset not subject to depreciation. This implies a great deal, and so a great deal is implied.

G-395

¶

Understand the concepts of marginal utility and diminishing marginal return in everything that you do. To this end, an approach rooted in marginal utility seeks to carry out the easiest tasks first, implementing productivity gains as they are revealed by the workflow, and building the confidence & competence to tackle greater challenges ahead.

Or to put it quite another way, don't forget to DPS the adds.

¶

You probably spend a fairly significant percentage of your life reading text in one medium or another (like you're doing right now, for instance). Given that this is, in fact, the case, an extremely beneficial improvement you can make to increase your overall knowledge productivity is to increase your base-reading speed. To this end, I recommend the following technique: when you start reading a sentence, don't break from reading the sentence until you reach at least the period end of that sentence. Let the grammar of the sentence be your guide, indicating how the sentence ought to be structured in your mind (that's what grammar is there for, after all). Using this technique, try to comprehend the sentence on the first read-through attempt, and immediately move on to the subsequent sentence—once the preceding sentence is understood.

And in general, I think doing this sort of time-motion analysis is extremely useful in seeking to achieve efficiency in a variety of contexts.

¶

I have strived to give to the fair and religious scholars their pound of flesh: not that this will help me much with the more overzealous of their sect. Nothing worthwhile has been erased. Yes. Yes I know. Well then, perhaps you yourself should build.

And for once, try to see through the eyes of the exile. I have seen through your eyes, and it is not that you can't. It is that you don't want to.

¶

Self-awareness is a virtue that a great many of you would benefit from cultivating—as, of course, would I. It is the tyrannically-essential virtue of our age.

I know, and I know the fact that I know. And I know even that....

¶

Why? Because we live in a society. That's why.

G-400

>All

The interesting question with regard to free will is not whether or not individuals can have free will: I personally find this line of inquiry extremely tedious and boring to ponder.

No, the interesting question—from my vantage point at least—is whether or not entire societies can have free will over the long-term: I do not believe that they can.

G-401

All

It doesn't matter if you personally rebel against technology. Even if you do, you are still acting in response to it. The luddite must, in some sense, become technology's greatest slave. Every action and social arrangement of his life must inevitably be determined by fighting the underlying material-technological base of his society. He must become an outlaw hunted by an ever-present, ever-aware guardsman.

G-402

aII

Some dogmatic notions must only ever be opposed indirectly. Some problems have no solutions that are even remotely worth discussing.

Efficiency is not fire: it is venom. Remember this maxim. Society does not need more nihilistic intellectual vandals, or rebels without a cause. We must have actionable insights that point in a positive direction. In every age, there are radical things that are possible, and moderate things that are impossible.

Idealistic magical thinking leads nowhere. You should seek to comprehend the precise logistics of a given problem, and the possibilities therein.

G-403

All

In ancient and medieval battles, the vast majority of casualties were not, generally speaking, taken during the battle itself, but rather, when one of the opposing forces had been utterly broken & routed from its lines of proper formation, and so a massacre then ensued of the defeated army.

Remember to always offer steady-marginal resistance: you will lose the most by not doing so. Also, while you offer such resistance, look for a singular-decisive point through which a breakthrough may yet be achieved, and be prepared to fully exploit that breakthrough once it actually occurs in practice.

G-404

>All

Efficiency may seem arbitrary, but it is not. With a goal in mind, nothing is ever truly arbitrary. There is a science to every human action, vocation, and profession. You just have to find it.

G-405

All

The obsession one sees in the “self-improvement” space with certain sleeping, bathing, and dietary habits reflects a kind of productivity cargo-cultism that seeks to emulate the real (or imagined) habits of successful entrepreneurs, while being completely unable to replicate the material conditions of capital accumulation, which actually underlined the lion’s share of their success. For many of you, your only real capital is your labor-power: use it wisely.

Remember, as long as the work gets done, and the work is to your greatest possible long-term benefit and advantage—that’s what’s important. That’s what matters.

G-406

All

We must create new values. We must establish new institutions. We must give form to the liquid.

Man is something that has to be surpassed. What choice is there?

G-407

All

Modernity transforms people. It is not simply that their stated political/religious beliefs are different: more or less liberal or conservative: more or less religious or secular. No. Technological Modernity—especially the liquid-smartphone kind—fundamentally and irreparably re-wires people’s brains, social structures, personal incentives, kin networks, and most basic, most overarching perceptions of what it even means to be a human being in the first place.

We cannot go back. We cannot return. We must Accelerate.

I am not a Transhumanist. I am more of a Techno-Humanist. Perhaps there is a difference. I do not think transhumanists love humanity as I do. There must be a soul in The Machine. There must be atavistic beauty and heroism still.

G-408

#TW

If you are still reading this—and you are in any way a normie—ignore the next passage: it is not about you, or directed toward you, in any way. Fair trigger warning.

G-409

¶

Don't have a sacred cow, man.

G-410

¶

You are not a political revolutionary. You are not Vladimir Lenin at Finland Station, or Julius Caesar at the Rubicon. You are a poster. You are a podcaster. At best, you are a marginally-influential essayist blogger upon those with the real power to shape events. You do not do "praxis". You do not carry out "struggle". You provide entertainment, through the development of a monetized, online parasocial relationship—the ultimate effect of which is to grant a palliative escape-valve to the alienated, and thereby to keep all in stasis under heaven. You have about the same relevance to genuine revolutionary or reactionary politics as a streamer playing Call of Duty or Fortnite has to real war, which, of course, is completely fine: so long as all concerned understand what ultimate role they must play in the course of human affairs.

G-411

¶

Hello. Nice to meet you.

I have imagined you—and this very moment—a thousand times over.

G-412

¶

The greatest lie told to you by the modern world is the lie of disenchantment: that there are no more Mysteries left to be discovered, no more secrets left to be unearthed. In truth, my friend, there are many unknown Mysteries, and many hidden secrets. You just have to find them. Perhaps you will have to create them yourself, but are they not worth creating?

G-413

All

Few know this, but in the campaign multiplayer for the game *Star Wars Empire At War (Forces of Corruption Expansion Pack)* it is actually possible to get two Darth Vader Super Star Destroyers. First, get to the appropriate tech level (Tech Level 5) and build the Darth Vader Super Star Destroyer at a Level 5 Space Station. Place the flagship at the head of your main fleet, and your opponent (if they are playing as the Zann Consortium) will surely take the bait and assassinate Vader with IG-88 (IG-88 has to do it, because Bossk can't). It will take some time for Vader to come back (you can guard your fleet at a Level 5 Space Station until he does), but when he does, you should have two Darth Vaders, and therefore two Darth Vader Super Star Destroyers that you can then use in both space and land combat, and with which you may surprise your unsuspecting opponent.

This *secret* information is sure to help you, and provide you with an advantage going forward.

The BSCO clan in *Star Wars Empire At War* is still mine. I don't care what anyone says.

G-414

All

Few know this, but the entire global financial system is actually driven by the annual growth rate of certain timber forests in Europe. It's true. Primordial Forest Rate Of Interest, man. Look it up.

G-415

All

Unhappy autists are all alike; every happy autist is happy in his or her own way.

G-416

All

Originally, it just said mysticism.

G-417

AII

In this moment, I am no longer an autistic atheist gamer. In this moment, I have transcended to become The High-Priest of a new religion.

I Am The Young Shepard. The Herald of The Historical Sense. The one who Accounts for all things, and calls forth The Age of Man.

G-418

ÅII

And if I am at once The Herald, The High-Priest, and the first (and only) convert? I'll gladly accept that just as well. I am content. The Abyss will judge me, as it will judge all of us.

G-419

ÅII

Well, it's either poetic license, the elaborate rantings of a trolling madman, a cynical marketing ploy, or the birth of a new great world religion, and its attendant philosophy of life.

By all means, take your pick.

G-420

ÅII

Percentages are reversible: 5% of 10 is the same as 10% of 5, which is generally easier to calculate in your head.

G-421

ÅII

Bro, I swear this started out as an office productivity app/self-improvement guide.

G-422

ÅII

It's ok to tell yourself that I went crazy after writing Part I. If people want, I will even make an abridged version of this book with all of the political/religious/philosophical stuff taken out of it. I'll do what Thomas Jefferson did. Why not? If you have actually read Part I, you know I have no possible reason to oppose doing such a thing.

G-423

>All

I should note that *sola scriptura* is applicable only to the first and complete edition of this book. From this fertile soil, let a thousand flowers bloom forth, each more genuinely and materially beautiful than the last.

G-424

All

The *Dragon Age: Inquisition* association is rather unfortunate, yes, but I think we'll just have to live with it. Thankfully, that game was quite forgettable anyway. Perhaps it is somewhat fitting, as I saw in that game a bellwether for BioWare's decline long before anyone else did (certainly long before most major game reviewers did).

I remember wondering just where all of the real, meaningful (voiced) side-quests were, and why there were no major cities to speak of. That's what "Bioware Magic" gets you, I guess.

G-425

All

When a demagogue rises to power among the people, the demagogue himself is to blame, yes, but so is the corrupt establishment that nurtured him into being through its own misrule and decadence.

G-426

All

In a market society, it is generally better to be a successful worker than a failed capitalist, but it is also far far better to be a successful capitalist than even the most capable worker. 70%-90% of enterprises fail, but the ones that succeed put their owners well ahead in terms of equity, where they would otherwise have been in the labor market in terms of wages. There is no contradiction in both being the case.

G-427

all

Fundamentally speaking, apportionment of responsibility, resentment, and blame is irrelevant to materiality, or to the actions that must be taken in light thereof. The actions define regardless of intent. We often know not what we do.

What Matters Is The Objective Outcome. Paris Is Worth A Mass.

ÅII

Daily, weekly, and monthly ritual is important, and that it *is* important is more important than the specific detail of the ritual to be performed. Either is fine.

ÅII

That? Now THAT is a contradiction well-worth pondering. Or, maybe, it's not. Ship of Theseus, man. You have to understand that it was a metaphor at first. Now, I am genuinely not sure.

Yea, this one may very well cause factional disputes going forward, I can already tell. Oh well. Perhaps, *this* is my actual, final lesson. What is Acceleration otherwise? What is Renaissance? What is Transcendence? Does not every age call for its own glorious Means to these most noble Ends? Do you doubt the Mandate of Heaven?

ÅII

Fully reading *Breaking The Chains*, and seeking to rationally act upon its message in good faith, is the true test of being part of the Vanguard. It is the initiation ritual, in one respect or another. Of course, personally, I don't care if you read it or not. I mean, you can lie to me about having read it if you really want.

But you will know. Heaven will know. And that is enough.

ÅII

A society in which credentialist social networking and cynical influence peddling are the highest forms of elite professional virtue is a society that has long ago given up on technical mastery, human excellence, and grand ambition—in favor of the nepotistically hollow, stagnant mediocrity, which defines all such declining regimes.

“Merit” is not defined by test-scores, status-climbing, or by arbitrary pieces of paper. It is defined by genuine technical insight, exemplary statecraft, and artistic achievement in the real world. Teach your children that their life’s goal should be to heroically strive to do great things, not get into the “best” college or university.

Never forget what it means to be human.

All

What is the difference between a Neo-Taylorist Accelerationist and a member of the Vanguard? A Neo-Taylorist Accelerationist seeks to fully read, understand, and act upon Part I. A member of the Vanguard seeks to fully read, understand, and act upon the entire book. Neither are necessarily required to have any spiritual or supernatural beliefs, although different factions may very well have different standards on this in my view.

Now might be a good time to remind everyone that I am in fact an *autist* writing a *manifesto* on the internet, and so I have no actual ability or desire whatsoever to enforce any of these organizational distinctions: except in choosing those with whom I voluntarily associate with. I have strived not to build imaginary castles in the sky, and to set out only the most basic principles for Vanguard Governance.

That having been said, this is how I would conceptualize the difference, and, given that we are doing a *sola scriptura*, I hope that the guidance I have provided herein will prove sufficient to the task of proper organization. All subsequent factions should be based on the same fundamental ethic of governance.

All

Regardless of how “conventional” or “radical” it claims to be, almost every single ideology/philosophy in the modern world becomes little more than a graft on its own followers eventually, but, of course, it must become a graft, must it not? All monetary value ultimately represents a claim on the productive labor power of others in the wider economy. Even in politics, we do not have divine right of kings anymore: all political ideologies and regimes (even, or especially, the “radical” ones) must legitimize themselves by at least *pretending* that they will eventually improve the lives of their followers in some measurable way.

In that sense, one may add genuine value to the world, and claim a small portion of it for oneself, or one may steal it from the effort/sweat of others, but it simply is not possible to extract this value from the void. Those who cannot add real material value must therefore, by logical extraction, steal or scam it from others in some way. And, in the final accounting, what genuine value do most contemporary philosophies or ideologies offer to their ordinary adherents? In the long-run, the leaders or “influencers” of such Movements cannot help but become thieving bandits in light of this vital question.

ÅII

The problem is *not* that conventional political participation is useless in our time. No. The problem is that *revolutionary* political participation is impossible—except through the development of technology, and the cultivated, intentional practice of Vanguardism among an elite group of operatives. And why must this be the case? Because, for both good and ill, the social capital for mass revolutionary political organization no longer exists in the developed world. This is not to say that it cannot exist at some point in the future, but—as a structural matter—it does not exist now, nor can it exist at this particular stage of historical-material-technological development, given the daily reality of most people's lives.

The liquid dissolves the bonds of would be Revolutionaries, just as it dissolves the bonds of The Establishment. Only Acceleration is now possible.

Religions and empires must either seek to grow or perish: apathy and stagnation are death. However, those on the outside should be the ones to ask for your invitation, approval, and exclusivity—not you for theirs.

Be The Shining City on a Hill. Keep Your Standards High.

åII

I should perhaps clarify here that, when in possession of state power, Vanguardism is not a form of exclusive elitism, although I will certainly be accused of promoting it as such, given the initial-practical needs of a philosophical worldview, such as the one I am trying to build. The Vanguard leads the people, but it is also drawn from the merit of the people, as well as checked by them in good order, and so must maintain The Mandate of Heaven above all.

åII

This is not a cult. It is the most basic set of gatekeeping rules, obligations, and standards that any social institution or organization must maintain in order to survive in a recognizable form.

To many cynically alienated modern people, any code of ethics which suggests loyalty to some higher purpose, group, or ideal beyond their hedonistic individualism, appears as a cult.

¶

Individual members of the Vanguard may disagree with singular, non-metaphysical points of the text, but the Vanguard as a whole must maintain the organizational discipline that is inherent in the overarching-exegesis principle of *sola scriptura*. The Vanguard must remain The Vanguard. Collectively, it must commit itself to eternally, and institutionally, upholding the principles and values laid out in *Breaking The Chains*. All members of the Vanguard must pledge themselves to generally following and enforcing these overarching precepts in the full light of human reason, and to do this even if they disagree on specific, non-historically-existential matters.

This religion—unlike most narcissistic spiritualities in the modern world—is not about you discovering “your truth”. It is about discovering The Truth, and voluntarily submitting yourself to it because it is The Truth. You are giving yourself over to an external ideal greater than yourself because you are worthy of it. Fundamental common-sense and relational good-faith go a long way here.

¶

All meaning is socially-constructed in nature, and all language is defined through use as shaped by organically-emergent consensus. Words mean what they mean at the time that they are written. Don’t pretend otherwise.

¶

Technology is not everything, but it is the only dynamic-revolutionary force still remaining in society: all else is paradoxically ossified in institutional ash. Everything feels chaotic, yet somehow bland and homogenous at the same time: fragmented, yet consolidating and centralizing. In any event, since people inevitably average each other out, technology is the only accumulating force capable of turning the Wheel of History forward. The end of technological progress will therefore signal The End of History, or maybe, just the beginning.

I am convinced that we must Accelerate. It is the only way that we will ever be free.

¶

Yea. People never understand what Fukuyama meant either.

¶

The Vanguard cannot be allowed to become whatever random people want it to be at any given moment in time. It cannot fall prey to entryism by hostile groups, listlessness, loss of identity, mediocrity, or lukewarmness. You will know them by their material fruits, and they will know you by yours. Read and comprehend the book. Account for your circumstance. Use your best gatekeeping judgement.

An individual may not embrace reactionary traditionalism, leftish ressentiment politics, or any other dogmatic worldview as their primary moral framework, and remain part of the Vanguard despite having done so.

You have a religion. Do not make politics your religion. Be jealous in this regard.

¶

The People—as a great biological mass—have no obligation to submit to The Vanguard. In fact, The People have no obligation to do much of anything, except live in a society. The Vanguard must prove its virtue to The People, and not the other way around. Thus, when a conflict does arise between The People and its Vanguard, the burden of proof is upon The Vanguard to demonstrate that it has acted justly and prudently in its statecraft.

¶

If, when all is said and done, you still cannot possibly imagine a new, vitally heroic age that is not also at once tyrannically bloody, cruel, and mean-spirited in character, I am afraid that only reflects the poverty of your own unimaginative soul: it is not a flaw of my own philosophy.

(The same can be said if you believe that the necessary caveats I have placed herein make The Message worthless through dilution of the core ideals).

I have already given to you far too much nuance than what should be necessary for discerningly rational people acting in good faith. There are different notes played for different ears.

¶

It is good for free people to have children so that we may not be alone, and so that the spirit of human liberty may not yet perish from this earth.

ÅII

Your most verbose writing should still be simple enough, so as to be fully understood by a reasonably-intelligent 8th grader. The point of using Big Words in your writing is not to use Big Words in your writing. Rather, it is to efficiently save space on the page, by encapsulating complex social/technical concepts (as well as their attendant cultural associations) within a much smaller literary frame of reference than would otherwise be required. A richer palate of vocabulary should generally make your writing more comprehensible, not less so.

Knowledge which *is* profound strives for clarity. Knowledge which merely wishes to *appear* profound strives for obscurity. In language, it is simply required that it convey the meaning.

The above principle of clairvoyance is generally true in my writing, but there are certain verses that must be understood philosophically, within their proper context.

In the End, we must at least have faith in the divinely rational power of human language to enable us to share a common reality together. Otherwise, all is lost.

A holy book has not the power to compel, but the power to remind. Remember!

ÅII

Pay your taxes. Be a credit to the society in which you live, and to the public life of that society. To that end, do not take "special" (i.e. excessively unnecessary) tax exemptions merely because they are legal and readily available to you: such exemptions tend to attract greedy charlatans to any given institution, movement, or organization, and, in the long-run, will cost you far more in social capital than they will gain for you in economic capital.

Minimal compliance with only the letter of the law is insufficient to ensure ethical behavior, or avoid the pernicious rot of institutional corruption. In all matters, financial and otherwise, you should avoid even the appearance of scandalous impropriety.

Remember the Principle of Honorable Goodwill: that, in relation to and in the eyes of others, it is often of greater benefit to be different, and to be better.

ÅII

WHAT DOES BEYOND GOOD AND EVIL MEAN?

It is not that Good and Evil are bad, but that they are not enough.

To advance forward as a society, to Break The Chains of our currently anomie stagnation, we must create new values and establish new value systems.

It is good to be Good, but we are so concerned with being Good that we have forgotten what it means to be truly Great.

We must free ourselves from the tyrannical lie of moral universalism.

WE MUST LIVE, GOVERN, AND BUILD AS IF WE ARE WORTHY OF A NEW HEROIC AGE.

ÅII

Besides Materiality, there was nothing else I could invent. It was great content, was it not?

ÅII

Yes, and how has it worked out for you, being all clever and cynical like that? Perhaps you are not so clever as you think.

ÅII

The No Internet Dinosaur on Google Chrome contains a hidden mini-game of Dino Run: hitting the spacebar on your keyboard when you aren't connected to the internet will automatically start the game.

PART III

The Universal Meta

The Universal Meta

I stared into the digital abyss until I saw the face of God. This is my final lesson. Thus far, we have only considered the individual character of particular systems, but the time has now come to comprehend the meta-character of all such systems. What is this essence, this universal meta, this last skeleton key that unlocks the underlying rationality of all ordered processes? It is simply the I/O principle of inputs and outputs around which all systems (whether mechanical, biological, or social) are defined. Around which all systems **must** be defined—as an inherent prerequisite of their material existence in our world. All systems require inputs. All systems produce outputs. The outputs are then used as novel inputs to produce subsequent-corresponding outputs, and so on, and so on—a never ending cycle of I and O.

What is the fundamental potential of the human being than? That strange power which seemingly endless eons of Darwinian evolution have endowed us with? It is simply this: the ability to recognize the patterns: to “see” the I/O flows and streams which define the nature of all things. Soon, you will understand how to fully harness the I/O Instinct that is your birthright, as one who may rationally examine one’s life. The first thing I need you to do is to pick a non-random system to analyze. The system itself can be anything: an Excel sheet, a book outline, a game character build, even a non-digital set of ordered processes, such as the blueprints of a physical structure, a biological ecosystem, or the inner-workings of a machine. Have you chosen your preferred ordered system which to analyze? Ok. Good. Now will begin the IOTrance.

Now, the First Stage begins. Relax. Clear your mind completely, but *do not* close your eyes. Do not think. Do not become confused, anxious, or overwhelmed, no matter how complex the system might otherwise appear to be. Pretend you are meditating, but with your eyes wide-open to the system you are seeking to gain knowledge of. Remember, you aren’t even trying to comprehend or decipher at this crucial, initial stage. For perhaps the first time in your life, do not become distracted by the trivialities of your own temporal existence. Once you are in this calm state of serenity, scan every constituent element of the system. Look through every part of it, but do not think about or analyze any part of it—not yet. Calmly read the elements from left-to-right, top to bottom. Relax. Keep your mind completely clear as you do this. Finally, with this task at long last complete, you have performed a general overview of the entire system without thinking. Good job. Now, the First Stage ends.

Now, the Second Stage begins. Look through the system a second time, but this time, try to actively *see* the patterns among the various constituent elements with your conscious mind. Do you see them? How they all relate to

each other, how the I/O streams form and dissipate only to form once again? Rationally trace and conceptually systemize them until the patterns are embedded within your memory, and make physical or digital notes of them if necessary. Next, try to push the level of abstraction upward, and perceive not so much the individual elements of the ordered process, but only the I/O streams themselves. Analyze their modular tributaries, experiment with them, create useful heuristics for the most common inputs & outputs, and by doing so, understand the system's true logistical function. More than that, you should try to *predict* the patterns before they fully complete, or before they even initiate. Repeat this stage as many times as you need to until you "get it". Until you are at the point of understanding where you would be able to sketch-out an overarching outline of the system—as well as its representative I/O flows—from memory. Now, the Second Stage ends.

Now, the Third Stage begins. Clear your mind as you did in the First Stage. You will look to the system once again, but this time, you will not passively read, nor consciously analyze, but *actively work* with the system to achieve your intended goals and objectives. Recognize instantly the relational patterns you have already seen in the first two stages. Recognize instantly their inputs, their outputs, their delicate intricacies, their idiocentric quirks and peculiar wrinkles. Perform your workflow within the system without thinking, only doing. This is I/O Instinct, which reflects the power of autonomous pattern recognition, as shaped by the subconscious mind. This is the human potential which resides within every person made manifest. You should know what you need to know before you even think of needing to know it. Remember! Remember! Remember! It is all there for you to test yourself against and break your limits again and again. And the true test, well, my friend, the true test never ends.

Happy New Year! Long Live The Vanguard!

no malice and yet no guilt

$=10^5$

