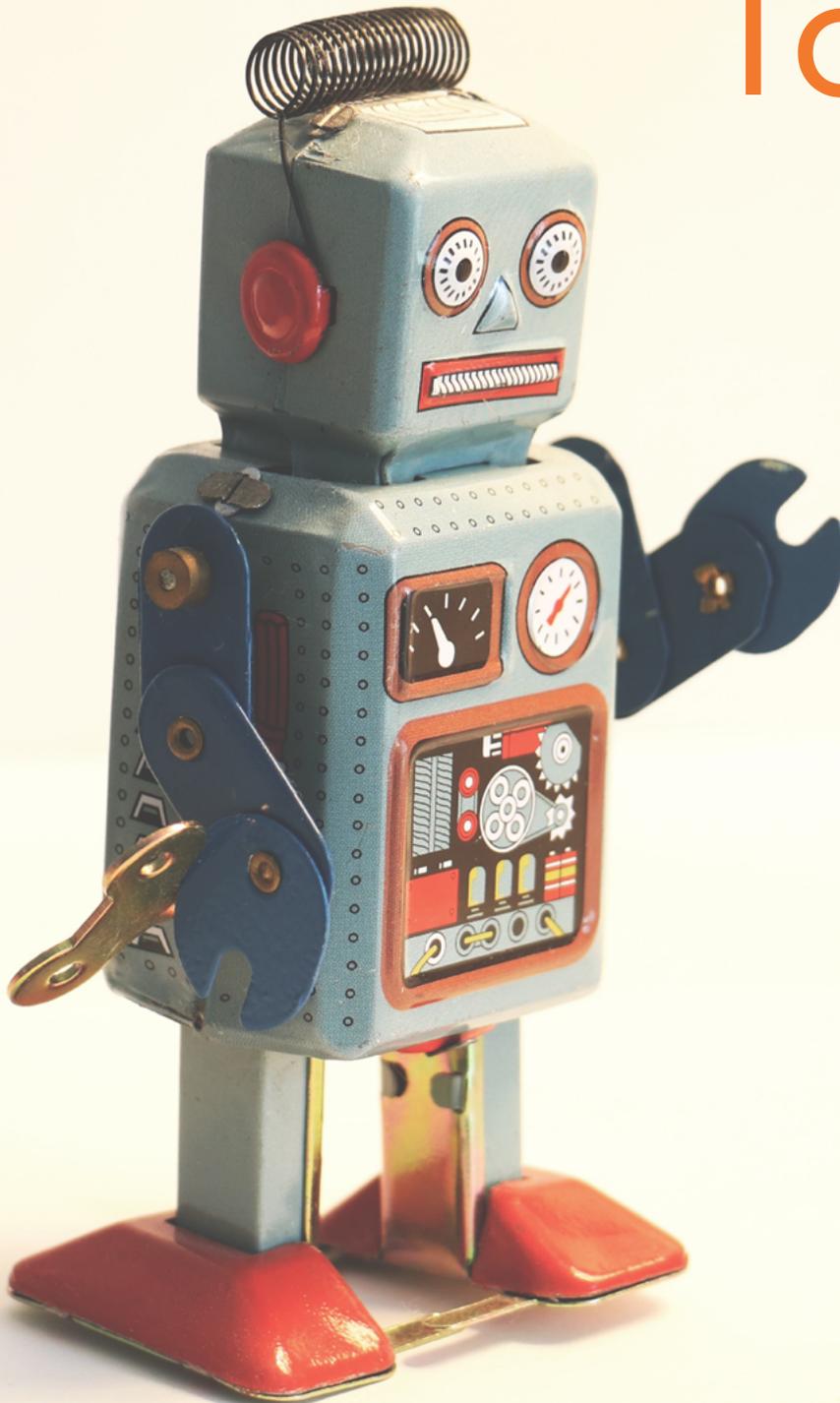


USING AI & AUTOMATION
TO RECLAIM THE VALUE OF
HUMAN WORK

The Human Touch

A WHITEPAPER



Introduction

Automation, RPA, AI, Machine & Deep learning, IoT – We are inundated with buzzwords and ads for software promising better productivity. In real life, however, this ever-increasing arsenal of tools often adds complexity, rather than freeing up resources that would empower our teams to do their best work.

Painting on automation with a broad brush may save a few mouse clicks but to transform your business it will take more careful application. On the following pages, we will explore ways in which you can use automation to reclaim the value of your team: the designers, the account executives, the humans that drive the success of your business.

I'm going to boil it all down to the least sexy buzzword in the buzzword dictionary: process. A clearly defined, optimized process is the key to successful automation.

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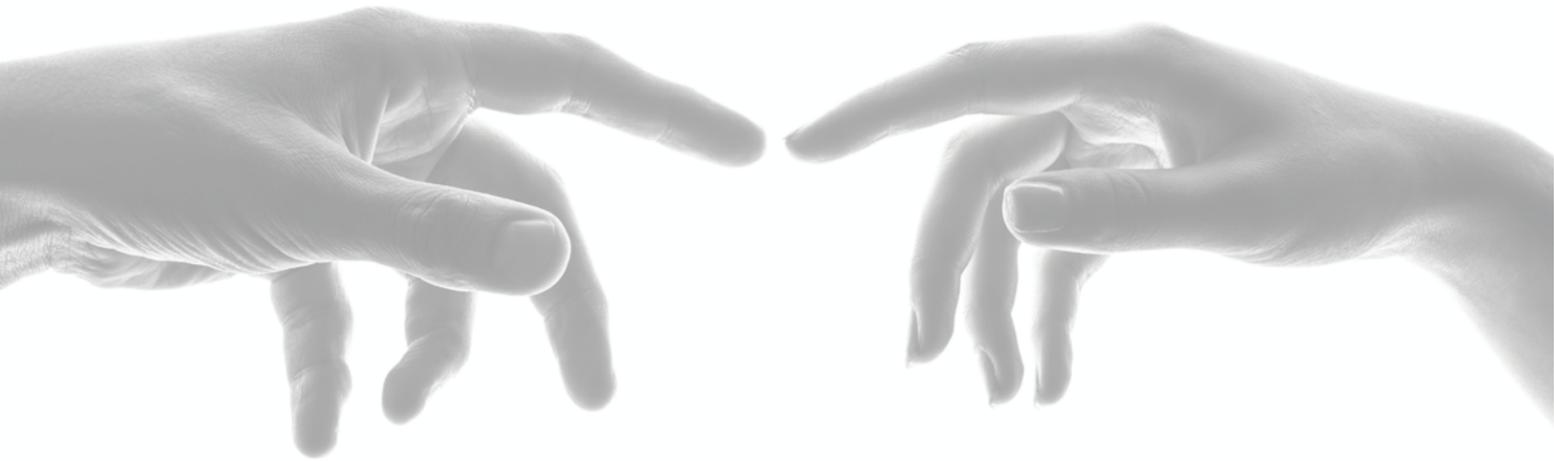
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AI vs. Automation

Let's cover the basic differences between AI and automation and how they apply to improving our lives as human knowledge workers.



AUTOMATION

Automation is a series of processes that begin, happen on their own, then end when they are completed, without help or intervention. There may be variable inputs, but the outcome can be determined in advance. There is no judgement or recognition involved.

Think about actions like Excel macros, Zapier zaps, Asana approvals, Trello reminders etc.



ARTIFICIAL INTELLIGENCE

AI is given a process, but it's able to analyze what it finds to make decisions on its own.

Moving forward, I'll use the term automation generically and specify where AI is involved.

The Value of Human Work

People have been talking about computers doing the work of humans since the 1940's, a natural evolution of the same discussion about machines in factory and farm work. The tone of this conversation has taken many forms, painting pictures as utopian as the Jetsons and as dystopian as the Matrix. Each an example of our hopes and fears about what technology could make possible.

In my utopian world, we humans exclusively use our effort for tasks that bring value to the world and joy to us. There will always be tasks we don't want to do but these should always be consciously and strategically limited to what is necessary to support valuable and joyful work.

Time tracking affects every department:

A familiar example is time tracking: most knowledge workers track time spent on their tasks:

- **Designers** do it, to account for their designs services, i.e. their meaningful and joyful work
- **Account managers** approve it and analyze it in projects to accomplish their own meaningful and hopefully joyful work,
- **Finance** needs it to run payroll and analyze profitability, another human-value-added meaningful thing to do.

Without the right tools, think of all the effort wasted not only on the timesheets themselves, but also on the hold ups and tracking down that takes place when the timesheet doesn't happen.

HERE'S A REALLY BAD WAY

in a spreadsheet with no other tools to help log time against the work that needs tracking. You might as well be doing it with a pencil.

HERE'S A BETTER WAY

use a tool that has information available about what projects and tasks you're assigned to, and a timer to stop and start as you stop and start working on tasks. At its best it could even be available right inside your project management tool, be AI-enabled, or even sync with your payroll system.



“ If this is a problem you've already solved, you know it has an immediate impact on efficiency, adoption and morale. **Imagine all the other processes in your day to day operations that have similar waterfall effects and that haven't been tackled yet?** ”

Automation Begins and Ends...

While it seems counterintuitive, good automation begins and ends with human action. Machines serve our needs so it stands to reason that we should judge when their intervention is required. Too much automation can leave users that interact with it feeling cold or unheard, or worse, find that the automation doesn't actually improve the process.

Take the following common automation command: Send to manager.

Seems straightforward, right? To you and me it does, sure, but to a computer it's not straightforward at all.

Who is the manager? Of whom?

On which project?

Is that person out on leave?

Do they have an approval threshold dollar value?

Our human brains answer these questions so fast we don't even think of them as questions.

To work effectively with automation, you need to think each of these elements all the way through, or the automation will just be another thing that everyone ignores. When was the last time you read the labor posters in the break room?

“ At the end of the day, automation is like the honey badger: it's a bad ass, but it doesn't give a sh!t. ”

Business processes are built around people, their experience and expertise.

Business processes are filled with exceptions and nuances; senior workers don't expect their junior colleagues to understand the reasons behind every action. In the same way, we shouldn't expect computers to just “know” the constituent parts of our work.

Another area where human judgement is critical is timing.

Timing can change everything about an interaction. Move too fast and you push the other party away. Move too slowly and they may lose interest or simply do the task themselves. Automation begins and ends when we tell it to and moves as fast as we specify. No more and no less. Automation cannot read your audience and it can't decide it would be better to come back later.

Likewise, automation can't follow up (aside from sending notifications). It can't check on Bob. You remember Bob, the guy in accounting whose daughter is sick. Bob is a great guy but his follow-through hasn't been the best since his daughter has been in the hospital. Go and check on Bob and ask how he is. Automation won't.

...with Humans

AN EXAMPLE

A sales order automation might consist of something like the following:

- CRM (i.e., Salesforce) status change triggers a contract process
- Info from the CRM populates a document in a signature automation tool (i.e., DocuSign)
- The signature automation tool sends the contract to the customer

Now our automation is interacting with a person. Does the customer feel ready to sign it? It's up to the sales professional to make sure the CRM is updated and the customer is in the mood BEFORE automation takes over. The automation's job is to reduce effort but only a human can consider a customer's feelings.

The process continues:

- If the customer hasn't signed, the tool sends a reminder
- The customer signs
- The tool sends signed copies to all parties
- A workflow automation tool (i.e., Zapier) files the contract in the correct place
- Other departments are notified about the sale

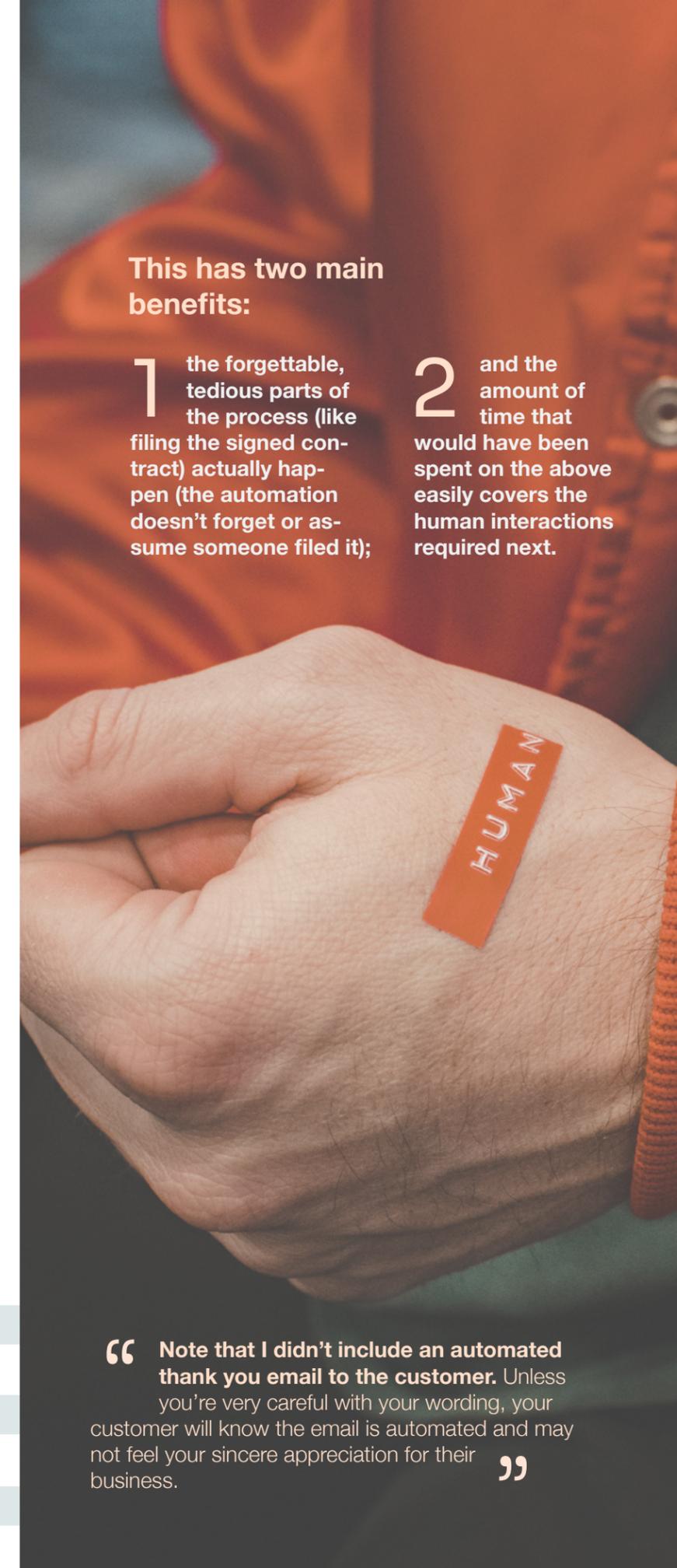
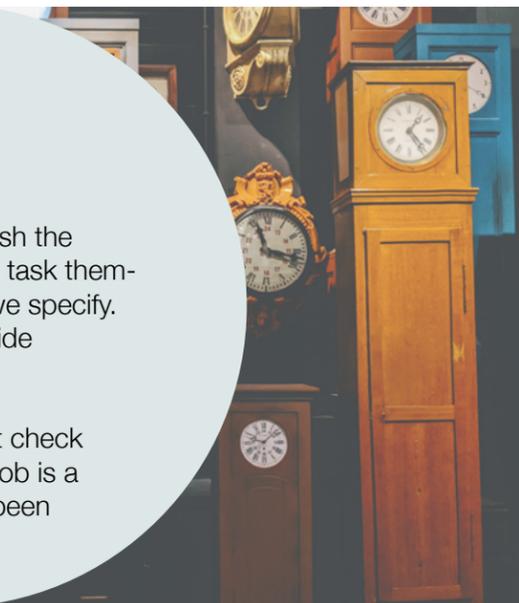
AUTOMATION REDUCED EFFORT

- No looking up information
- No filling out forms or double data entry
- No gathering signatures
- No sending reminders
- No filing

This has two main benefits:

1 the forgettable, tedious parts of the process (like filing the signed contract) actually happen (the automation doesn't forget or assume someone filed it);

2 and the amount of time that would have been spent on the above easily covers the human interactions required next.



“ Note that I didn't include an automated thank you email to the customer. Unless you're very careful with your wording, your customer will know the email is automated and may not feel your sincere appreciation for their business. ”

Using Automation Successfully

Reading about the wizardry of automation, it's only natural to want to jump right in. But experience tells us there's no point in trying to implement automation without a clear process to apply it to. Like that old joke about building the car as you're driving it down the road, we must understand where we are going and why before we can build our vehicle.

Whether a process exists already or is brand new, defining it is the first step to successful automation. Once we know what we're working with we can analyze the steps, look for fundamental efficiencies and finally apply automation strategically for maximum effect.

DEFINING & ANALYZING PROCESSES

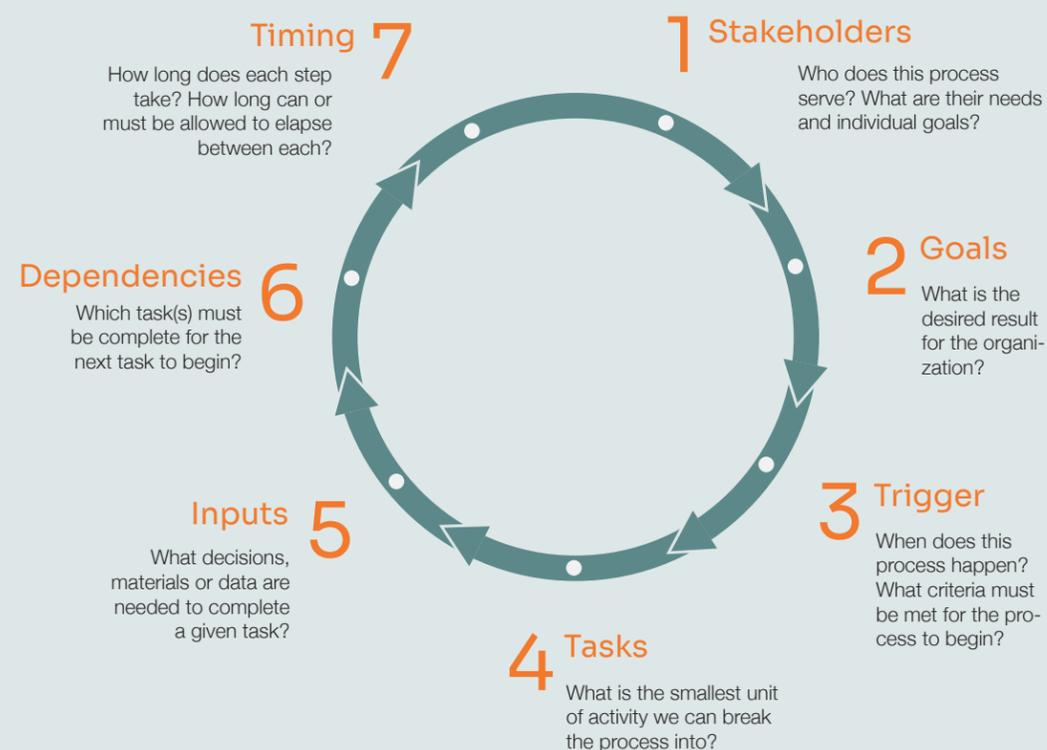
Process definition is the act of documenting an operation in detail showing all its elements. It can be a simple diagram or go on for many pages. If you've ever seen a decision tree, this is an example of a process diagram. **A whiteboard is usually a good place to start.**



ELEMENTS OF A PROCESS

Understanding the components of a process helps with its definition.

Many chapters of management textbooks address this but I think the relevant elements are these, in the following order.

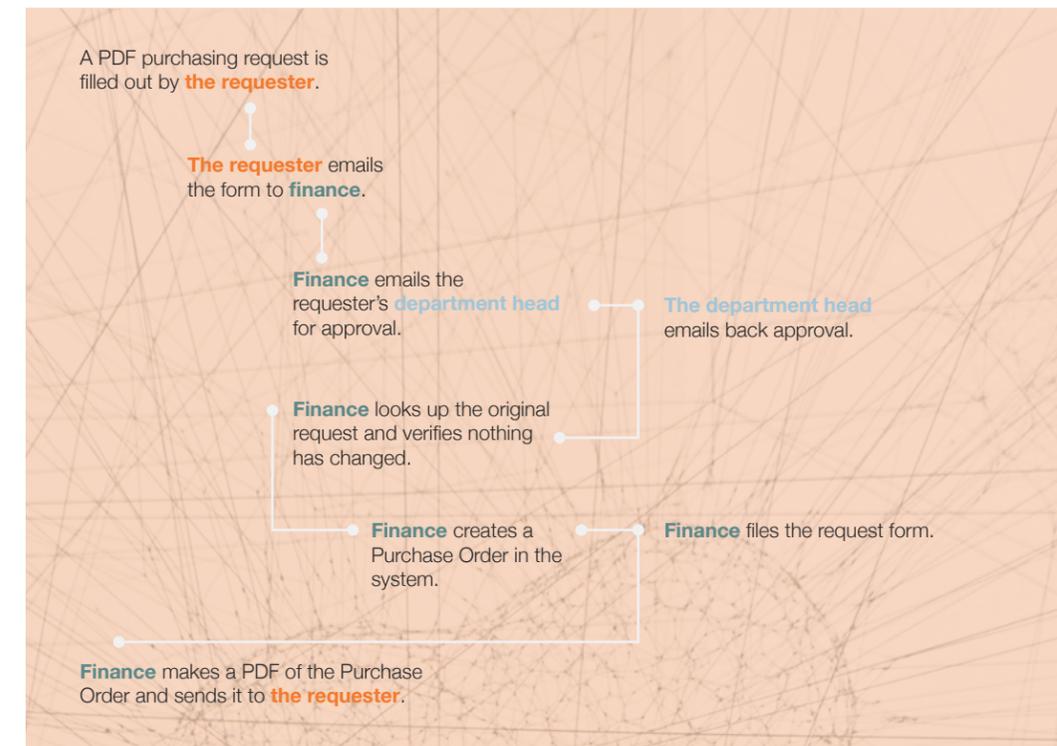


Analyzing a Process

Once you have a process defined, you can begin analyzing it. Our first goal is to optimize the existing process for efficiency and effectiveness before we add automation.

FUNDAMENTAL ANALYSIS

Let's consider a typical purchasing process. Scanning the tasks, look for unnecessary steps or duplicated work. There is always some low-hanging fruit.



This process suffers from typical inefficiencies:

Relevant information exists but isn't searchable or shareable by everyone.

Information from one system is manually entered in another system. Hint: if someone is filling out a paper or PDF form in 2022, this is most likely a waste of time.

Email is sent without any explanatory or interactive value i.e., just to share a file or for a binary approval.

The same person touches interdependent parts of the process more than once.

The files are stored or the names of files are changed based on known criteria.

Without changing anything about the tools they are using, we can improve the efficiency of this process a bit:

- **The requester** can send the purchase request directly to the **department head**.
- Make a rule setting a threshold for requiring approval (so the department head is not spending 15 minutes approving a \$5 widget).
- The Purchase Orders can be posted to a central location for reference (i.e., SharePoint).

Analyzing a Process

STRATEGIC ANALYSIS

Now that we've optimized the process inherently, let's see how technology can further improve it.



We need to identify the systems where the relevant actions and information currently live. Every task in this process relates to the accounting system, although the users each care about something different:

- **the requester** is interested in **inventory**,
- **the department head** is interested in the **cost**,
- **finance** is interested in **internal controls**.

What this tells us is that the technology solution lives within a single system. This is a key understanding.

The accounting system they are using may or may not have the capacity to help, but it is critical to understand that the accounting system is ground zero.



Now Can We Automate?

When we think about applying automation tools, we should start from where we are to identify inherent inefficiencies: what tools are we currently using? Can they be optimized to improve and automate our process?

If the answer is yes, then the existing system or tool is the best place to start. Adding the latest it-app to a system without a compelling reason is a good way to get your team to ignore it. The app becomes another step in an inefficient process.

Let's assume for a moment that the current accounting system they are using has the ability to create a user that can enter a purchase order but that purchase order would require the approval of someone else.

An unapproved purchase order is just another way of saying a purchase request.

If the accounting system can:

Handle the additional users needed to accommodate the requests;

Restrict the access of the users to the parts of the system that they need to see;

Route the purchase order for approval to someone other than the requestor based on variable criteria; and

Notify Finance when all of the above is completed,

then there's no need to look further; your system can automate the process. It may take a bit of reading and watching a few YouTube videos to figure it out, but once you do, congratulations!!

BUT WHAT IF WE CAN'T ?

If the accounting system can't handle the additional users or can't control permissions effectively or fails in some other way, that is when we start to consider new or additional tools.

There are standalone tools that handle purchase requests and purchase orders that integrate with mass market accounting systems (like QuickBooks or Xero). One of these might be the right solution. If, however, you happen to have the scope, authority and ability, at this point I'd recommend you consider your process in the context of all other business processes that touch the accounting system.

Enterprise Resource Planning

Our purchasing use case is a classic example of the need for an ERP (Enterprise Resource Planning) system. This is a tool that combines operations and accounting in an interoperable way. For service businesses, this is sometimes called a PSA or Professional Services Automation. Let's imagine this process inside an ERP system:

- **The requester logs into the ERP and fills out a purchase request form (the "form" being the UX inside the ERP)**
- **The manager approves the purchase order.**
 - The ERP system creates the purchase order, including a sequential number.
 - The ERP system posts the purchase order to the appropriate accounting ledger.
 - The ERP system notifies the requester, the manager and Finance via the preferred notification method for each user
 - The complete details of the purchase order are available throughout the ERP system (also available to download as a PDF).
- The ERP interrogates the requested purchase order and determines that the amount is above the requester's approval threshold (and therefore needs a manager's approval) and who the requester's manager is.
- The ERP routes the Purchase Order to the manager for approval, depending on the manager's user settings, they might get an email about it, it might show up as an ERP notification, or simply appear in their approval queue.

From eight human efforts to two, and the remaining two are absolutely necessary.

Note that it could have been one if the requested purchase order was for an amount less than the requester's approval threshold (if one had been set).

What's crazy is that some companies already have tools like this in place but simply don't use them. Sometimes there is a perception that it's mentally "easier" to do it the old way, though in my experience it is never less work.

Using Automation to Empower Humans

Our purchasing example may not seem very empowering, but I disagree. As someone who has worked in the before and after versions, I feel empowered by using an ERP.

The system removes busy work like finding and filling out a form from my already busy day.

The UX of the ERP system helps me fill in the blanks, like exactly what items are available to be purchased.

I don't have to worry about my manager's 500 unread emails delaying them approving my request.

If my manager is out I don't have to chase anyone down, the system just sends my request on to the next approver.

I immediately see the Purchase Order in other parts of the ERP system so I'm confident that the project costs I'm tracking are up to date.

Most importantly, all these things contribute to my ability to spend more time on my actual job.

The immediate benefits are simple to understand but the long-term benefits may be less obvious. The nuggets of time saved by automation add up fast and if you approach your automation with goals in mind you can measure the results.

Imagine your team has a utilization rate of 80%, meaning they spend 80% of their time on work that you're billing customers for. If you estimate that your team spends two hours a week on inefficient processes (a modest amount depending on your industry), you could target an 85% utilization rate without any additional hours worked.

Or set a new target for innovation:

Keep your utilization rate at 80% and add a new KPI (key performance indicator) of your employees spending 5% of their time innovating on behalf of the company. Not every employee will be excited about this but you can be sure that many are up to the challenge, and that is value added for you and for your customers.

BROADER USE CASES

If you think that the purchasing example is too focused on higher-level workers or bigger companies, let's click back the microscope from purchasing for another example that affects everyone at every level of organizations of all sizes: expense reports.

Expense Reports: Mileage

Imagine this: rather than carrying around a paper log for mileage, which you'll then enter into a spreadsheet, put in an expense report, put that in an email and send for approval; how about a mobile app whose AI recognizes that you're driving during

the workday, notes when and where you started and ended, and ASKS YOU what project it should be billed to? Once the expense clears approval, you're automatically reimbursed directly to your checking account. **Let's review the benefits!**



You spend very little time tracking the mileage and expense and are even reminded to do it.



Despite the reduced effort, the information is captured in an accurate way including route information, stop and start times, etc.



You don't lend the company money any longer than necessary.



There's no administrative review.



The company gets more robust information about the expense.



The company shows its appreciation by reimbursing quickly.



The company understands its true expense liability as fast as it is incurred.



This is a win for everyone at every level.

Approvals: Travel Expenses

We can take it a step further:

A junior designer is told by their manager that the company wants them to attend a conference in Tokyo. It's a dream come true!

In many old-fashioned spend management programs, this young designer would have to pay for their flight and hotel themselves and then wait to be reimbursed by the company, in this case for thousands of dollars. Maybe the junior design just can't front the money.

Does it seem fair that they can't go to the conference that the employer is going to pay for anyway, just because of the timing of the spend?

Enter automation! Imagine a spend management program that includes pre-approval for travel, or routed requests for travel approval, travel that can be booked inside a portal that goes directly on the corporate account.

It's not a big ask: American Express, Expensify and Concur all offer some flavor of this, and those apps are already widely used.

All it takes is asking the question: how can this technology improve our lives?

Answer: we empower people to get what they need with a minimum of human intervention while still having appropriate financial controls in place.

Conclusion

While AI and automation may be some of today's top buzzwords, the real opportunity to use automation to improve our lives lies within ourselves.

The tools are exactly that: tools that we as people use to shape our work and our processes. It's up to us to find ways to empower ourselves, our colleagues and our organizations and apply the right tools to help.

It starts with analyzing and optimizing processes, taking inventory of the tools you likely already use and understanding their true capabilities. If we control how the tools are used, rather than allow technology to control us, anything is possible.

I advocate putting people at the center, developing the process around their wants and needs and finally applying automation to maximize the value of their work.



Joe Cangelosi
FOUNDER, PRINCIPAL

WANT TO LEARN MORE?

If you'd like to learn more about using automation and AI to improve the value of human work in your business, you can get in touch with us at hello@teelexinc.com

The Tee Lex Difference

We're not a consulting agency, and more than an accounting firm.

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We have deep industry experience in creative businesses like yours.

As a result, our narrowly targeted offering is expertly tailored to provide maximum tangible value to your business, so you can focus on what matters most – your business!

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Tee Lex Inc.

1178 N Topanga Canyon Blvd
Topanga, CA 90290

www.teelexinc.com

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