Secure. Produce. Correct. Comply![1]

Background

While we are making a new product, the customer problems we are solving have been around for a long time. Our advantage is that these problems have *not* been well solved in the past. This is mostly due to companies trying to milk their printer revenue with copier sales. With pandemic enforced WFH, there are more incentives for software developers to solve these problems, so they may not remain unsolved for long.

Kofax has a nice presentation that outlines this value.
1. **Security** Manage, secure, and govern your documents through unified printing, scanning, and automated workflows.
2. **Productivity** Ensure documents get to all the right people at the right time, every time, through the right workflows and processes.
3. **Compliance** Maintain a record of print and capture document workflows for tracking and auditing.

I would add a 4th category.
4. **Correctness** Check for mistakes in outgoing documents such as customer names not being on a database, line items add up to a total.

Leaving out the scanning and printing for now (they are less important for WFH and we can add them later with PMitC), we can do these 4 things already, at least to some degree, with code we have developed for PMitC, Mobility and other products

Product Overview

A document router / tracker with
1. Privacy guarantees
2. Audit trail
3. Compliance checks
4. Correctness checks

This would be fed manually or with an agent. E.g. An email agent that listens on an email account (possibly multiple accounts),

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[1] Alternate product names: *Productivity@Home*

The Product

The product would
1. Extract attached documents from incoming emails
2. Feed them to the document router / tracker along with the email metadata (sender + receiver + date etc)
3. Classify them and route to the appropriate person
   a. Maybe we could make the role-based rather than person-based. Roles could be
      i. Accountant
      ii. HR person
4. Extract salient information such as name, address and bill total
5. The documents would be placed in a shared list along with metadata from their contents with the classifier/extractor.
6. Everybody working from home could efficiently pick the documents they need to work on based on the meta-data.

This saves labour because no-one has to read all the incoming emails and fewer employees get the wrong documents

We can build on this base product with correctness checks, links to customer databases and accounting packages. The Compliance part can be done with an audit trail. We already have the code to digitally sign and store all the documents as required for an Australian Tax Office Audit. etc. etc..See Audit Trail concept.

Typical WFH Operation

1. Everyone in company **P** is working from home.
2. Customer emails payment for a product to **P.**
3. Our product keeps a database of documents and their classifications
4. Accountants working from home get a notification (maybe a gmail) of the documents
5. An accountant **A** pulls a document **D** from the database
6. **A** works on the document
7. **A** updates the document database with progress on **D**.
8. **A** optionally updates **D**.

Why We Can Build This

We have much of this technology already.
1. The documents would be placed in a shared list along with metadata extracted from their contents with the classifier/extractor. This is a shared list of PDFs and metadata along

with some UIs and a computation engine. These already exist in a highly-scalable ready-to-ship state in PMitC.

2. Document security already exists in our UniPdf library. This is standards-based PDF security.
3. We can use the same PDF security feature to keep cryptographic hashes of documents for a variable document version history.
4. I (Peter) am currently working on extracting information from PDFs.
5. Powerful [document classification](#) is now available in modern libraries.
6. I (Peter) built some HIPAA [compliance](#) software a few years ago.
7. There are some proposals for correctness checking [here](#).
8. This product is document-based, just like a print based workflow and unlike a Google Docs collaboration workflow. Therefore it should fit our customers' existing workflows.