

The PTA in plain English.

(See appendix for complexity)

Friday, 4 August 2017

what we did.

what we found.

what we suggest.

1.0 You asked us

"What is the vision for the PTA?"

Because a “vision” is a response to: a) our purpose and b) our problems and c) our environment, we researched these things before reporting back with our findings.



1.1 Vision components: Purpose

We invited different teams to "what is our purpose" workshops. Based on what we observed, the PTA's core purpose is:

"To help the public have positive and fair outcomes from their relationship with HMRC".



1.2 Vision components: Problems

We asked “*what would you do differently?*” and “*what is impeding your progress?*” and listened to the answers. We heard stories of many problems.

These problems show the PTA is blocked from helping the customer build a fair relationship with HMRC by a number of issues including data governance, information architecture and policy.



1.3 Vision components: Environment

The number of people in short, multi-employer PAYE roles is increasing. This is causing more call-centre customer support traffic at a time when leadership is committed to greater savings and efficiencies. At the same time, pressure is on to bring other parts of tax into the PAYE framework, increasing complexity and likely failure points.



1.4 The resulting vision

**We put these three components together
on a vision canvas and declared our vision
of the future of the PTA.**

**It's a story in two chapters
(and an epilogue) ...**



The first chapter is about **fixing tangible problems** that impact many vulnerable taxpayers while at the same time starting the process of cost-reduction and efficiency. By the end of this first chapter, the taxpayer struggling with shorter contracts and the pensioner with multiple pots will **no longer need to call us every week** as their difficult lives will be that little bit less unpredictable.

Our second chapter will build on the first with **much improved data accuracy** and an ever-reducing need for the customer to fix our data for us. As our data gets better, so will our help and advice. **We will offer, deep, relevant and personalised help** to the taxpayer where and when she needs it.

Our epilogue will take much longer, but our aspiration is to make accurate data available across all customer-relevant tax regimes (tax credits, SA) visible in real-time on any channel chosen by the customer. This includes transmission of data to partner channels such as Tesco till receipts to **make good our purpose of making our relationship as fair as and as productive as possible for the taxpayer.**

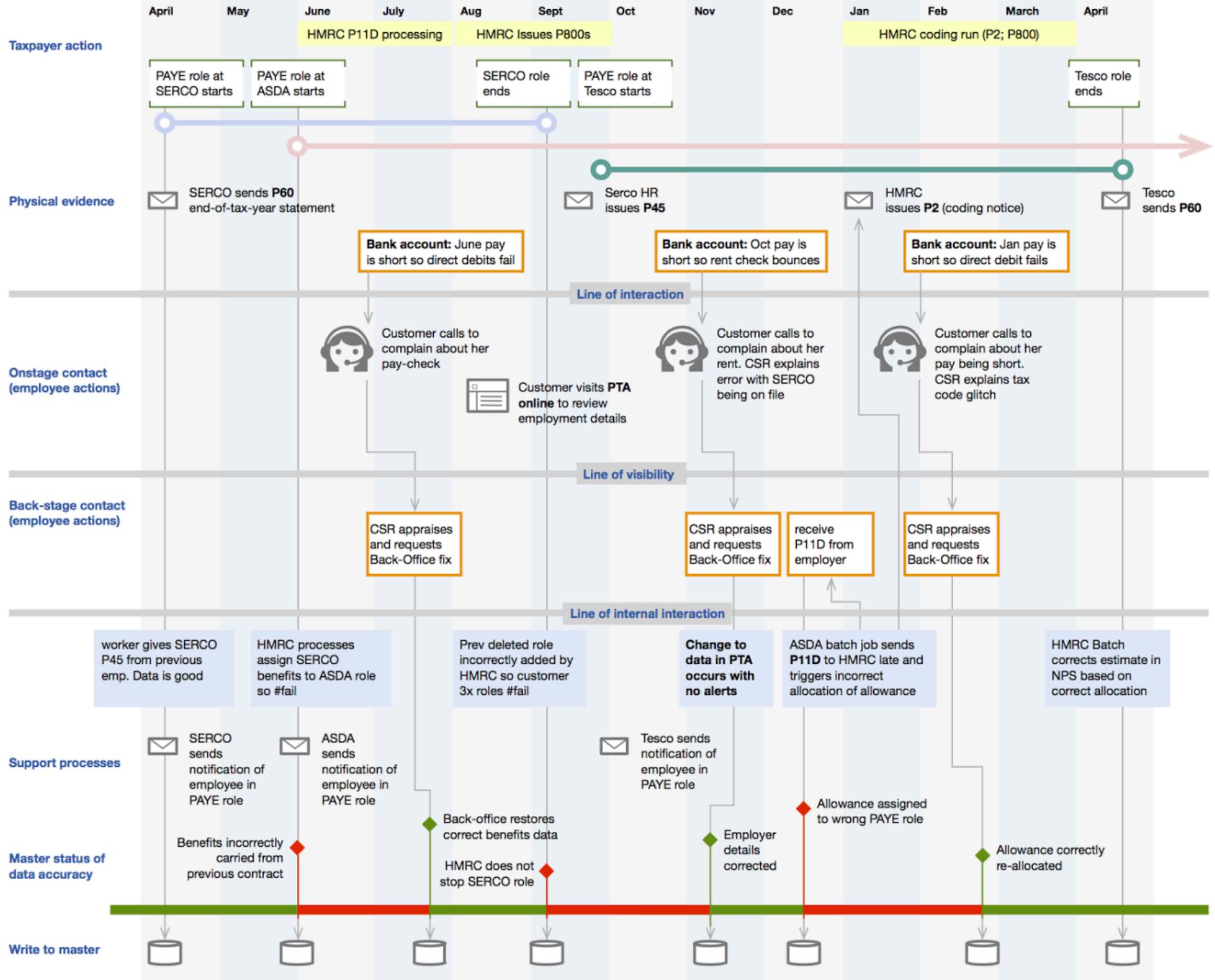


2.0 How do we get there? Part 1, the “as-is”



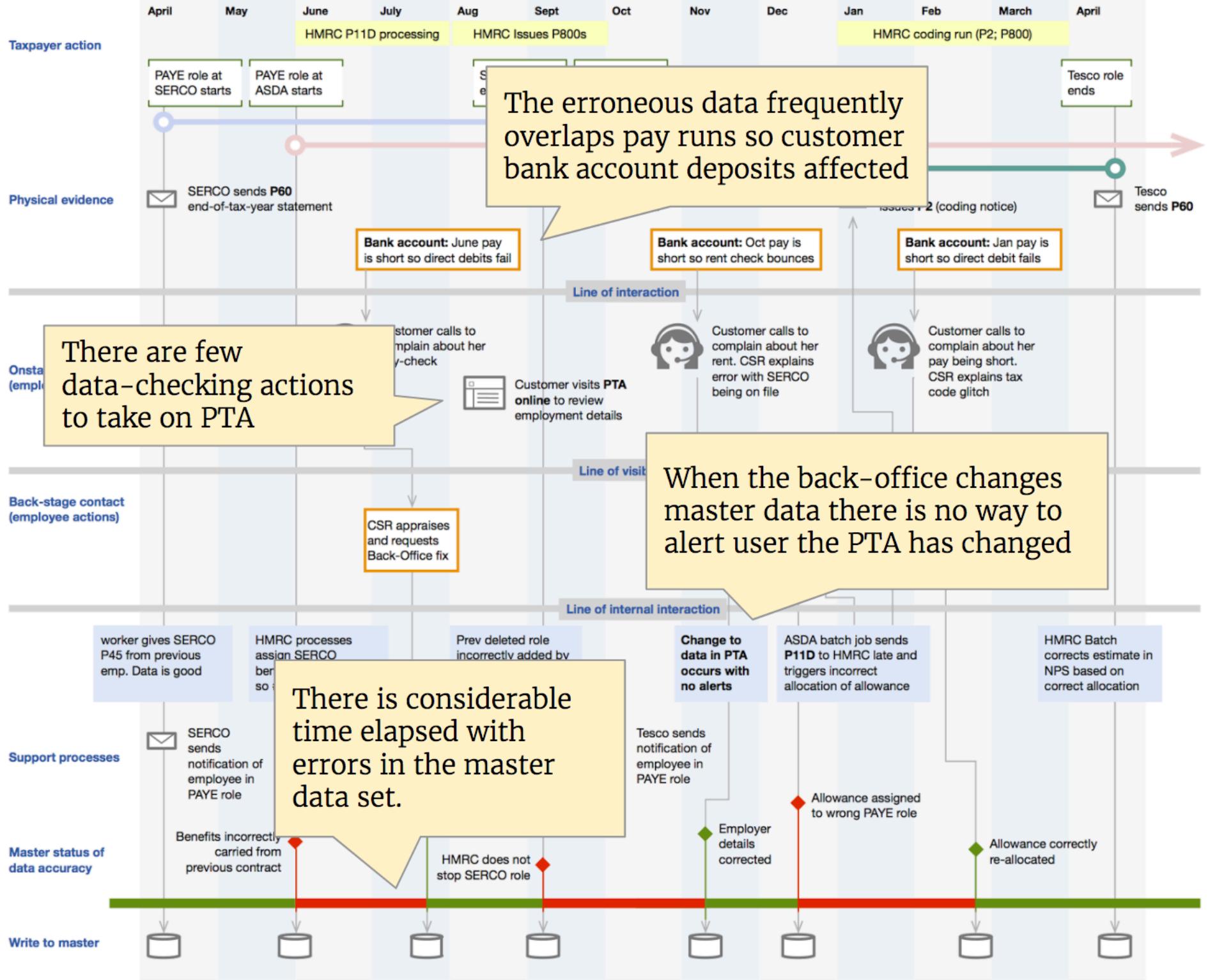
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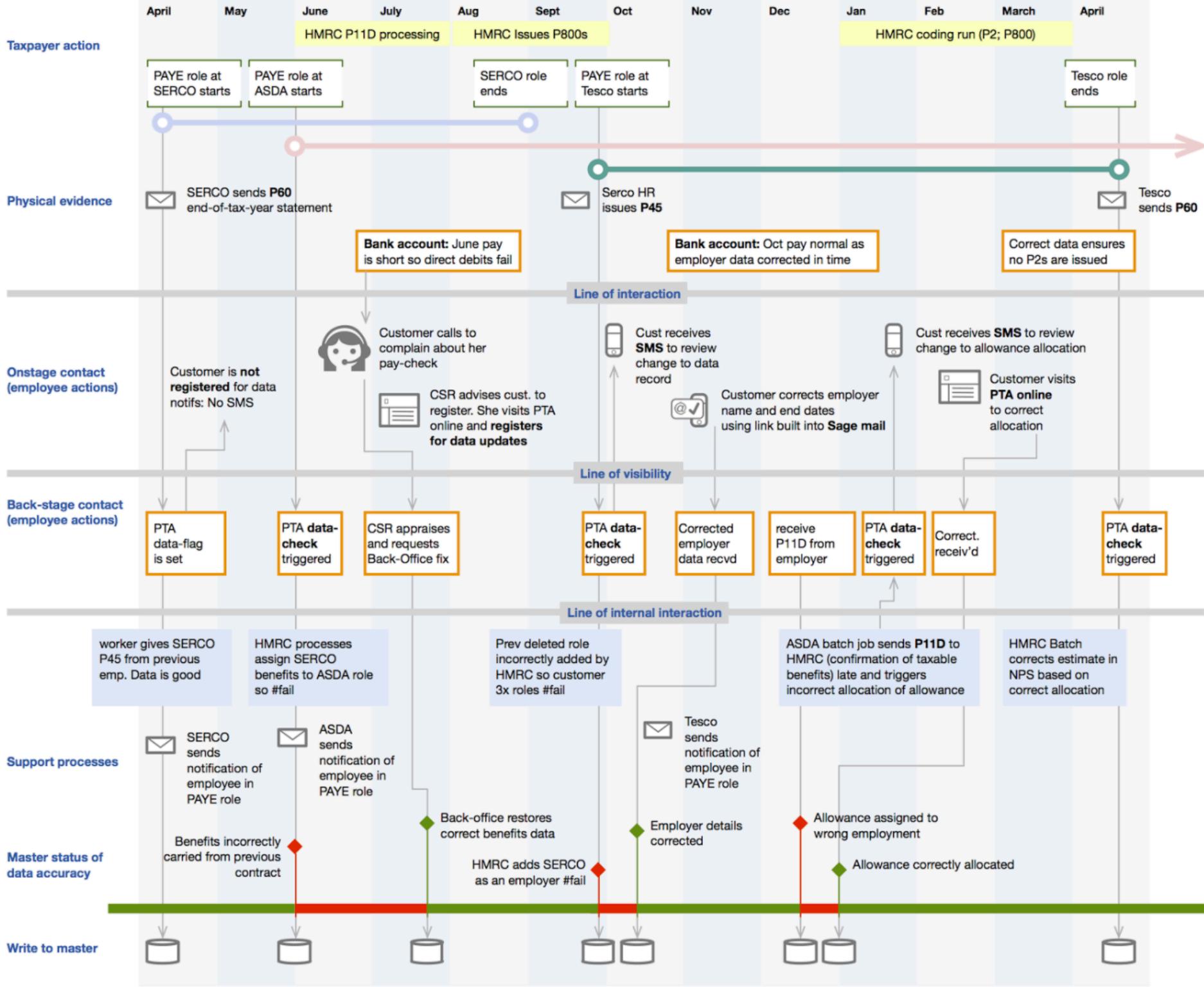


2.1 How do we get there? Part 2, the “to-be”



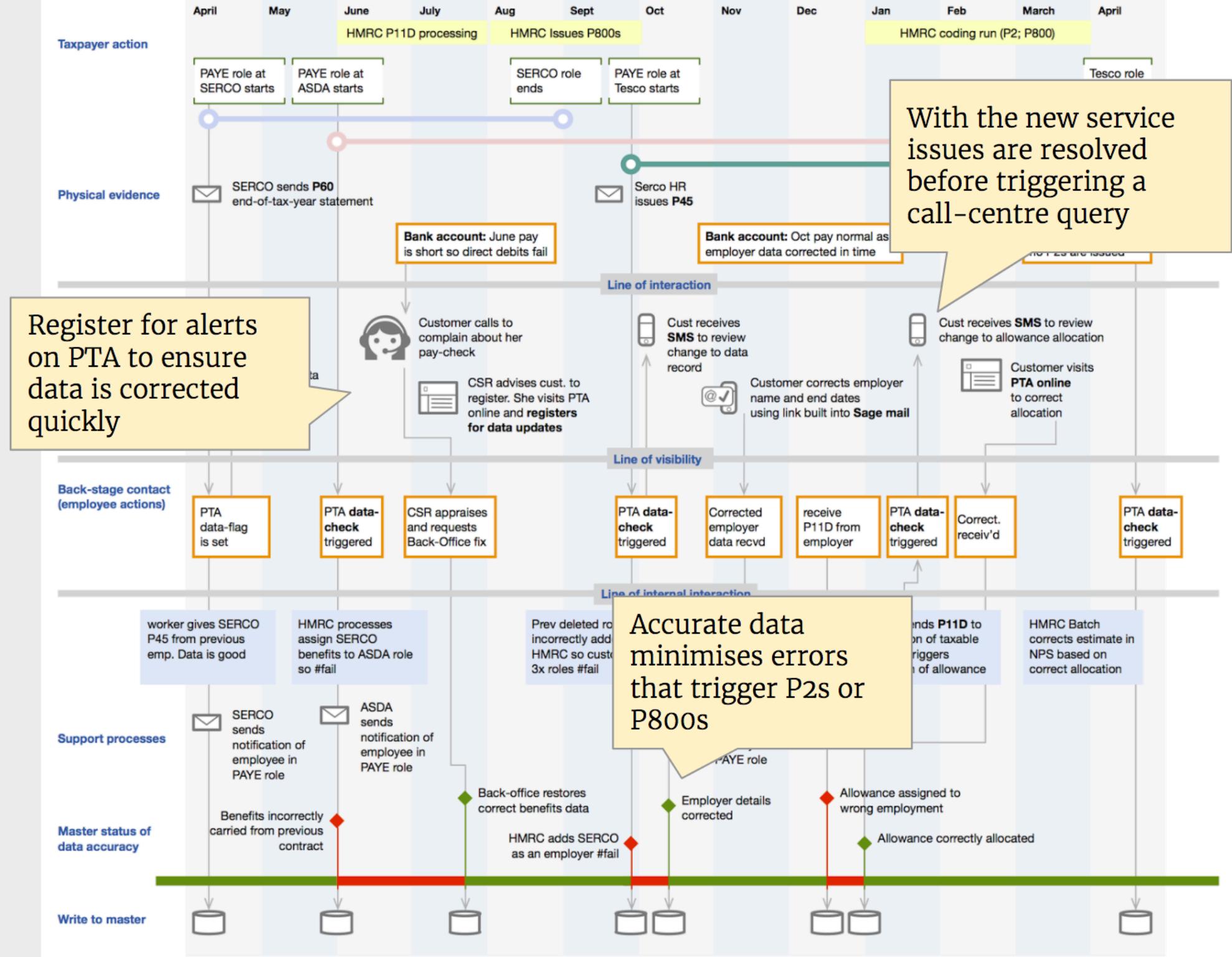
Part 2, the “to-be”

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2.2 How do we get there? Part 3, the “gaps”



Part 3, the “gaps”

We listed the gaps and described the initiatives that could be set in motion to get us to our new service.

| As-is service | To-be service | Filling the gaps |
|--|---|---|
| Data is not managed | Customer and HMRC are partners in the maintenance of data accuracy | Notification platform and population of timeline |
| Customers cannot find anything | Natural language query processing improves findability | Review architecture and source NL interface |
| We do not give advice to those that need it | Better personalised help system takes a step towards advisory | Review of off-the-shelf solutions and review of policy |



Part 3, the “gaps”

We listed the gaps and described the initiatives that could be set in motion to get us to our new service.

| “As-is service” issues | Proposed “to-be service” | Cross-disciplinary team initiatives (filling the gaps) |
|---|--|---|
| <p>Errors in data caused by increase in multi-job PAYE and instability in the workforce.</p> <p>The incorrect status of the customer data is causing the issue of “P” notices (P2; P800) which in turn increases the load on the customer support centre.</p> | <p>We will build and run a service which will poll all the data sources that make up the master customer record (employment start/end, dob, address, next of kin, dependants, taxable benefits etc) and will set a flag when it observes a change in the data.</p> <p>With this service running, we will be able to send SMS alerts to customers who have opted in asking them to react to the data change - (confirm, edit or mark for review).</p> <p>Other customers may use notification tools integrated with their productivity software such as Microsoft Outlook. The tools will host integrated functions to flag or edit the data.</p> <p>In some cases, the experience will be as simple as clicking on a link to state that a prompt is correct with no need to go beyond the mobile phone's message app.</p> <p>In other cases, the text will be longer or the change less clear in which case customers will be able to follow a link back into the PTA where they can review the latest changes on their master customer record timeline.</p> | <p>Establish review of data with the aim of building a status monitor.</p> <p>Start review of master customer record. Identify options for creating a “good enough” status monitor quickly (ie not re-architecting a HOD).</p> <p>Initiative to enable or adapt multi-channel messaging. Include process, compliance and technology in this work.</p> |
| <p>Information architecture with multiple duplicate entry points.</p> <p>No consistent search and navigation strategy means customers complain they can't find anything</p> | <p>As content is managed across gov.uk and HMRC, and links are either to secure entry points or deep-links to functionality, we will offer the customer a natural language search</p> <p>This could take the form of a chat interface that would invite the user to make a query the analyse the query in context and content and make recommendations or suggestions.</p> <p>In the MVP or r1 release this approach could be delivered in a very simplified form with complexity and features being added gradually.</p> | <p>Kick-off review of cross-domain content strategy and information architecture</p> <p>Define MVP for conversational UI (single text input that polls a static knowledge base)</p> <p>Review machine learning systems Microsoft Delve or IBM Watson. Explore hosted alternatives.</p> |
| <p>Our interpretation of the directive on “Giving financial advice” means we do not leverage our vast knowledge of tax; our knowledge and understanding of customer life-stages or our store of behavioural customer data to help our customers avoid bad tax situations.</p> | <p>“If I presented my income in a better way I might owe less tax, but I don’t have access to that level of guidance or the services of a private accountant” (insight from interview with Barbara Price) this insight nicely summarize why the to-be service will include advanced help functions.</p> <p>The help service will be contextually aware, with content changing based on seasonal variations or know tax-impacting events.</p> <p>The help service will be able in the PTA and will leverage the knowledge of the customer. The service will be aware of recent searches and actions and will react accordingly.</p> <p>The help service in the first instance will not give direct financial advice but in future releases we will find better ways to achieve this customer benefit while ensuring we remain compliant</p> | <p>Feasibility study of contextual help.</p> <p>Review and assessment of off-the-shelf solutions</p> <p>Policy working group around how might we be more helpful? Can we use the PTA service to offer help and advice and share our knowledge and experience</p> |



3.0 Next steps

- Assemble cross-disciplinary teams to include digital (technology; design; research) but also non-digital like Process Transformation; Fraud Prevention and Compliance.
- These teams need to be on-board from the start of discovery
- Feasibility study/discovery as required
- High-level process+service design



3.1 Next steps: Cost / reward analysis

TBC COMPARE COST TO SERVE IN CALLS INITIATED BY P2; P800; INCORRECT ALLOWANCE ALLOCATION; INCORRECT EMPLOYMENT END DATE; INCORRECTLY APPLIED TAXABLE BENEFITS WITH COST TO DEPLOY MVP.



3.2 Next steps: Technology proposal

We will build and run a **demon which will poll all the data sources that make up the master customer record** (employment start/end, dob, address, next of kin, dependants, taxable benefits etc) and will set a flag when it observes a change in the data.

With this demon running, we will be able to **send SMS alerts to customers** asking them to react to the data change - (confirm, edit or mark for review).

Customers will receive prompts to check their data across channels. Those who opt-in will receive SMS messages, others may use notification **tools integrated with their productivity software such as Microsoft Outlook**. In this instance, the tool will host an integrated function to flag or edit the data.

In some cases, the experience will be as simple as clicking on a link to state that a prompt is correct with no need to go beyond the mobile phone's message app. In other cases, the change less clear in which case customers will be able to follow a link back **into the PTA where they can review the latest changes on their master customer record timeline**.



3.3 Next steps: Technology architect response

“There is a new proposal for a MDTI publish/subscribe service, which could be great for this. When an event happens at the backend it would publish an event to a queue, a subscribing service like SMS or email could then subscribe to the queue and take an action to notify the customer to either come and verify, confirm or whatever as a result of the published event.”

“Simon Hough is the CTO architect on this piece of work. Will try send you some stuff when I’m back in the office next week with regards.”

Chris Henderson, Architect



3.4 Next steps: Process transformation

Our proposal aligns well with the following TES efforts:

- Create and maintain a traceable record of tax code changes
- Allow customers to review previous changes



Thanks

Any questions?

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HM Revenue & Customs