

Emily Blandford

Portfolio of work

Find out more

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I have anonymised these case studies, removing any branding elements that are in the originals.

Following a journey

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SITUATION

Several clients were interested in ways of better understanding a range of customer journeys, so our sales team wanted some dashboards to give an idea of what Mudano could do for them.

THE ASK

The dashboards should be technically simple so that they could be easily replicated in situations where clients want a more off-the-shelf solution. The example I designed for was intended to be generic enough that it could be manipulated to different contexts without too much extra effort. Similarly the style should be neutral so that it doesn't confer any specific brand.

APPROACH

For this project, we plotted a fictional mortgage journey to create dashboards to appeal to a range of users with differing needs. Our data engineers created a synthetic data set to facilitate this. Once the dashboards were built, I conducted detailed visual design quality reviews and got hands-on in Tableau to tweak the layout and create easy-to-read tooltips. I designed and ran "user" tests with colleagues to try out key user journeys on fresh eyes and improve overall usability.

LEARNINGS

The main challenge of this project was the lack of users to learn from. To overcome this, I focused more time experimenting and honing processes, which was really valuable.

We started this project during lockdown and Miro was centre-stage for sharing ideas and feedback. The brief was very wide, so most of my work was to find ways to focus without compromising value.

A view to check application volumes (customers starting a journey), enable reporting against targets (customers completing a journey) and understand customer demographics at a high level.

At a bit more detail we can see customer progress through stages of a journey. This would be more useful with additional contextual information to indicate potential reasons for drop out or rejection—potentially from an internal bank process, customer feedback, communication methods or touchpoints, broker interactions and so on.

At the more detailed end, I plotted each individual customer journey through the mortgage application process. This could link into a single customer view or help a service team to understand a customer's experience if they speak with them at some point during the process.

Understanding dependencies

SITUATION

Our clients' digital team wanted to be able to track at various levels the many features they were working on using data from Jira and other sources, primarily to better understand how dependent each feature was on other ongoing work.

THE ASK

The solution should enable people to report on progress more accurately, adjust plans where necessary and assign people to the most suitable projects. Our solution needed to integrate with an existing tool the digital team were using for high-level project planning.

Our clients wanted to create a data-led way of defining RAG status, initially to supplement the rating given by project leads, so the dashboards needed to enable this comparison where relevant.

These dashboards would be used in meetings as well as for individual reference, so they should facilitate more informed discussion to avoid a lot of back and forth while people look things up about their own features.

APPROACH

I worked closely with a Tableau developer and business analyst to define a site hierarchy and create wireframes that were quickly built in Tableau for client feedback. This enabled us to prototype faster on main concepts while we prepared to build the final output in D3.

Click thumbnail to enlarge image

This view is to help leads understand which projects need most attention. The "problems likely" axis is the data-led grading built on Jira data, compared with the colour RAG statuses given by project leads. This enables both improvement of the algorithm, and revision of human ratings where discrepancies arise to improve overall data quality.

This screen enables project leads to see progress towards new ways of working with Jira by highlighting areas that might need to be updated, or where people might need to adapt their use of Jira. This would ultimately help to improve data quality and make the tool much more valuable over time.

The hypothesis was that many projects are delayed by a feature or part of a feature being dependent on another, including people being spread too thinly across multiple features, but the extent of this was unknown. The network diagram would probably be too complex for most users, but they can filter to the features that are relevant for them easily.

Other views would link to a feature-specific view, to pin-point aspects of the project that could cause problems to other features. It would also link to defined risks and blockers, to be discussed in regular governance meetings.

The issue of adoption

Click thumbnail to enlarge image

SITUATION

An Accenture team had been commissioned for a huge transformation project for a telecommunications company, in which they were migrating from their current data architecture to a new set up and simultaneously migrating their reports to a new tool. They saw this as an opportunity to review existing reports to potentially make them more valuable to the business. The project lead invited me and some behaviour change design colleagues to propose an approach.

THE ASK

Given that people might find the migration disruptive, our approach needed to find ways of generating enthusiasm for the change. My team needed to be able to prove business value quickly, in a way that our clients could present clearly to their board at an upcoming meeting. As such, our pilot needed to be very targeted. Acknowledging that a dashboard or report, even if perfectly designed, is only useful if people want to use it, I created an approach that would integrate a typical design process for report creation with one for data culture—understanding how people feel about data and acknowledging pain points they might have generally with regard to data as well as with a particular report or tool.

LEARNINGS

The project design provided a strong framework that can easily be adopted by a other clients, and has already formed a large part of a successful pitch to a financial services client.

I would work with the business to understand how they would expect people to be using data, and define behaviours that would demonstrate these expectations. These would map to varying degrees to three overarching data behaviours and could be plotted to give an overall shape of the current situation from which to measure progress over time.

I would focus on one team to pilot the approach, conducting research to understand how they currently use reporting and how it could be improved to better respond to their business needs. Combined with the survey of data behaviours I'd create various user profiles and start to understand key user requirements for using data in their work.

To measure behaviours, I would design a survey to avoid people guessing which result is most desirable, and focus on what they see rather than what they themselves do. It would be conducted regularly among a wide group. Results of the survey would be easy to track over time and filter by business area to validate and improve staff engagement approaches.

I would run a variety of experiments, including some to prove the business value of user-centred design for reporting within this context. The prevailing aspects of these would form the design and adoption approaches that I would create with the business to democratise the process and enable long-term success beyond the pilot.

Managing operations

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SITUATION

Mudano's leadership teams wanted to reimagine how we might use data to manage the sometimes conflicting needs of projects and people. At the start of the project we were hiring a lot of people, and this tool to support resourcing would link closely with a similar one to support recruitment and onboarding, as well as another to track financial data.

THE ASK

The resourcing team wanted to get as many people onto billable projects as possible, so the dashboard needed to help them easily match people up to open roles. It also needed to support forecasting by giving a future view of what people would be working on.

LEARNINGS

I learned a lot on this project. I really enjoyed coming up with a visual language that could be flexible enough to work for a range of situations.

Methods of finding people for projects, monitoring skillsets and measuring project timeframes changed several times during the design phase, as did the team responsible for working on these things. I developed ways of prioritising and reacting to frequently expiring requirements as the business grew and new opportunities presented themselves.

My team produced a workable prototype that was used to highlight to Accenture how it's possible to present such business data to support the due diligence required prior to acquisition..

The timeline of people's joining dates is backwards, to draw emphasis to new joiners, forming a kind of conveyor belt of people entering the company. One of the requirements was to quickly find relevant work for new people, so it was important to see how many would be joining at a time and ideally have work lined up for their first week.

As a small company, forecasting was really important. This view gives an idea of when projects might be expiring by the volume of people joining the bench. Utilisation by role gives a view of specific job roles that have different utilisation levels to others, to facilitate discussion with the recruitment team if they need to hire more or fewer people for a specific role type.

To match people to roles, I introduced views in both directions from a person needing a role, and an open role needing to be filled. These would automatically filter to show only relevant people or roles, instead of all available.

To supplement high-level role descriptions we were building out a library of skills to enable more sophisticated matching and help people find roles that help them to reach their professional development goals.

Storytelling with data

Click thumbnail to enlarge image

SITUATION

I was asked to present something about information design to a group of graduate new joiners to introduce the topic to them. I was really inspired by a talk by Cole Nussbaumer-Knaflic at DataVizLive in 2020, so I chose to create a presentation to explain the value of storytelling and how to achieve it.

SUBJECT

The key focus in the presentation is on creating a narrative with a visualisation. It also covers some purposes of data visualisation, for example to identify patterns or to communicate ideas, some methods of storytelling, for example using visual references or encouraging audience engagement, and some pitfalls to avoid such as omitting relevant data or truncating axes.

RECEPTION

The graduate group gave great feedback on the presentation and word got around to their managers who asked me to adapt the content for a range of client situations.

The situation I used for the presentation was a real test we ran using different machine learning models to propose to a client that they might want to move away from the traditional machine learning model they were currently using.

I created a terrible graph of the data to demonstrate a potential output without any real design consideration. I then ran through a series of step-by-step improvements to the chart to show the systematic way I would go about redesigning a chart like this to more clearly tell a story.

To explain the concept of a narrative arc I used a storybook reference my audience was likely to be familiar with. I then plotted the key points of our example story on the same arc.

The final chart was shown in two parts to add tension to the break point on day nine when the machine learning models were set loose on previously unseen data types and monitored for how they performed.

Using a design process

Click thumbnail to enlarge image

SITUATION

I wanted to get more accustomed to public speaking, so applied to TinyVizTalks, which was my first external talk. Given the broad audience, I wanted to create something that would be relevant for a range of people working in data visualisation.

CONTENT

Rather than focusing on a technical element of visualisation I wanted to break down the design process to make it more approachable. I've found that a lot of information available about design processes uses quite a bit of design jargon and can be hard for non-designers to engage with, particularly when the situation doesn't allow for it in a formal way.

I've also experienced first hand how easy it can be to forget about users' needs when you have a challenging dataset on your hands, particularly when working alone on a project, as is likely the case for a lot of developers. So I wanted to give a simple framework to help people to focus on the real purpose of creating a dashboard.

RECEPTION

The talk went down really well with the TinyVizTalks audience. I adapted it for a later event hosted by InfinityWorks as part of a digital festival, which was also well-received. A contact I made from having given this talk invited me to judge the Women in Data Hackathon this year.

Recording—TinyVizTalks (May 2021)

Recording—Interactions (October 2021)

I started by explaining the difference in design approaches for regularly updated dashboards instead of more static reporting. Though both could use a design process as a guide, data visualisations to aid decision making require more user engagement than other types of visualisation.

I used three design process diagrams, including this one Mudano developed, to demonstrate that there's no singular right way to do things. And if you're in a situation where you can't start at the beginning of a process there can be ways to build in that user research and discovery at a later stage.

Using a common example of a stakeholder who says they know what they want to see in a chart (in this example, sales over time data), I showed a variety of possible reasons someone might want to see that chart, and how the presentation of the data would vary depending on the kinds of decisions someone would make using that data.

This led to proposing a very simple dashboard as a quick alternative to the obvious line chart, to encourage the audience to think beyond the first idea they might have to see what else they could reveal using different visualisations.

Colour theory for data viz

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SITUATION

Accenture's makeover monthly group gives people who are learning data visualisation an opportunity to improve their skills in dashboarding tools using a provided dataset, much like makeover Mondays. I joined them every month to give information design feedback on their submissions, which the organisers found helpful and invited me to give a more substantive presentation one month.

CONTENT

A common theme that came out was how to choose colours for dashboards, and so I chose to focus this presentation on colour theory to give the audience understanding of how colour supports their work rather than a fixed colour palette to use.

The presentation covers colour characteristics, colour values, accessibility considerations, the difference between sequential and categorical colour palettes and single or diverging gradients. I used examples from Tableau public to explain how theory works in context.

To help people choose balanced categorical colour palettes and understand why gradients work better for some hues than others, I gave an overview of colour values and characteristics, and how to draw attention using contrast.

I demonstrated how to use tools like Sim Daltonism to quickly test for accessibility for various colour deficiencies. Using this to tweak default colours for RAG statuses, bringing the focus to one end of the spectrum over the other depending on the needs of the situation.

Recognising how difficult it can be to choose completely distinct categorical colours that use contrast appropriately I worked through ways of grouping categories to make it easier. For example, animals could be grouped by family and domestic status.

One area that people seemed to be particularly interested in was how to use brand colours in dashboards. Though colour has a different function for branding than for information communication, I found and shared a method for selecting appropriate colours from a brand palette, using Accenture's as an example.

How we make sense of visualisations

Click thumbnail to enlarge image

SITUATION

I was invited to teach two lectures on information design for London College of Communication's first year user experience design students.

CONTENT

The course leader suggested that the students would be interested in understanding different chart types, which would align with a project they were working on.

Rather than giving a list of situations in which a particular chart type might be useful, which they could easily find using chart libraries online, I broke down some common chart types into the preattentive attributes (movement, colour, position and form) that enable us to process them visually. I explained these attributes using simple diagrams, demonstrating how some are more immediately recognised as different (such as colour and position) than others (such as shape and area).

This is one of the example diagrams I used to show how we process shape information. Within one colour we take quite a systematic approach, and can quite quickly get an estimate of proportions of each shape.

When colour reinforces the pattern given by shape we process it significantly faster than we would by shape alone.

When colour adds a different dimension to the dimension encoded in shape, our processing speed significantly decreases and we are more likely to be distracted or focus just on colour. There's a really great [tool](#) to demonstrate this concept from North Carolina State University.

An example of how we start to decode data from charts using preattentive processing, and why it's important to bear in mind when altering the structure of a chart of this type.

Monthly challenges

I frequently design wireframes for dashboards for other people to develop in Tableau, and recently have been developing my own skills too. Within Accenture's makeover monthly sessions I regularly offer information design feedback on people's dashboards, but I thought a better way to explain what I mean would be to create a dashboard myself, and put myself in the vulnerable position of critique too.

These are all on [Tableau public](#).

Click thumbnail to enlarge image

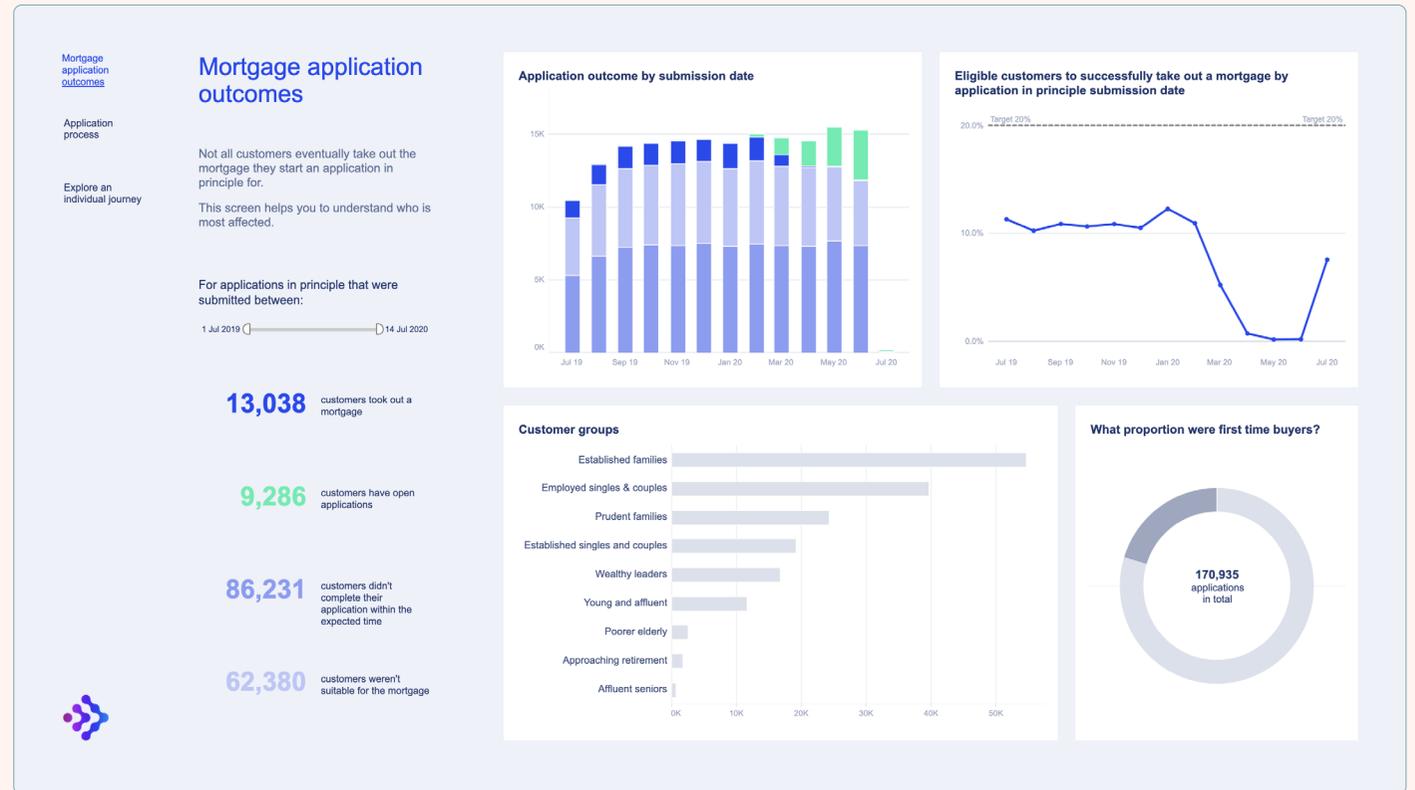
I was inspired by Nadieh Bremer and Zan Armstrong's graphic for *Scientific American* for this visualisation that shows birth rates throughout the year. I wanted to show the value of learning from other people's design decisions.

For this dashboard about unicorn companies (private companies valued at over \$1billion!) I used a monochrome palette to show that you don't need lots of colours to convey information effectively.

I wanted to show how valuable adding context can be to a visualisation to aid understanding. This presentation was a meandering tale of me trying to understand cryptocurrencies. I still don't...

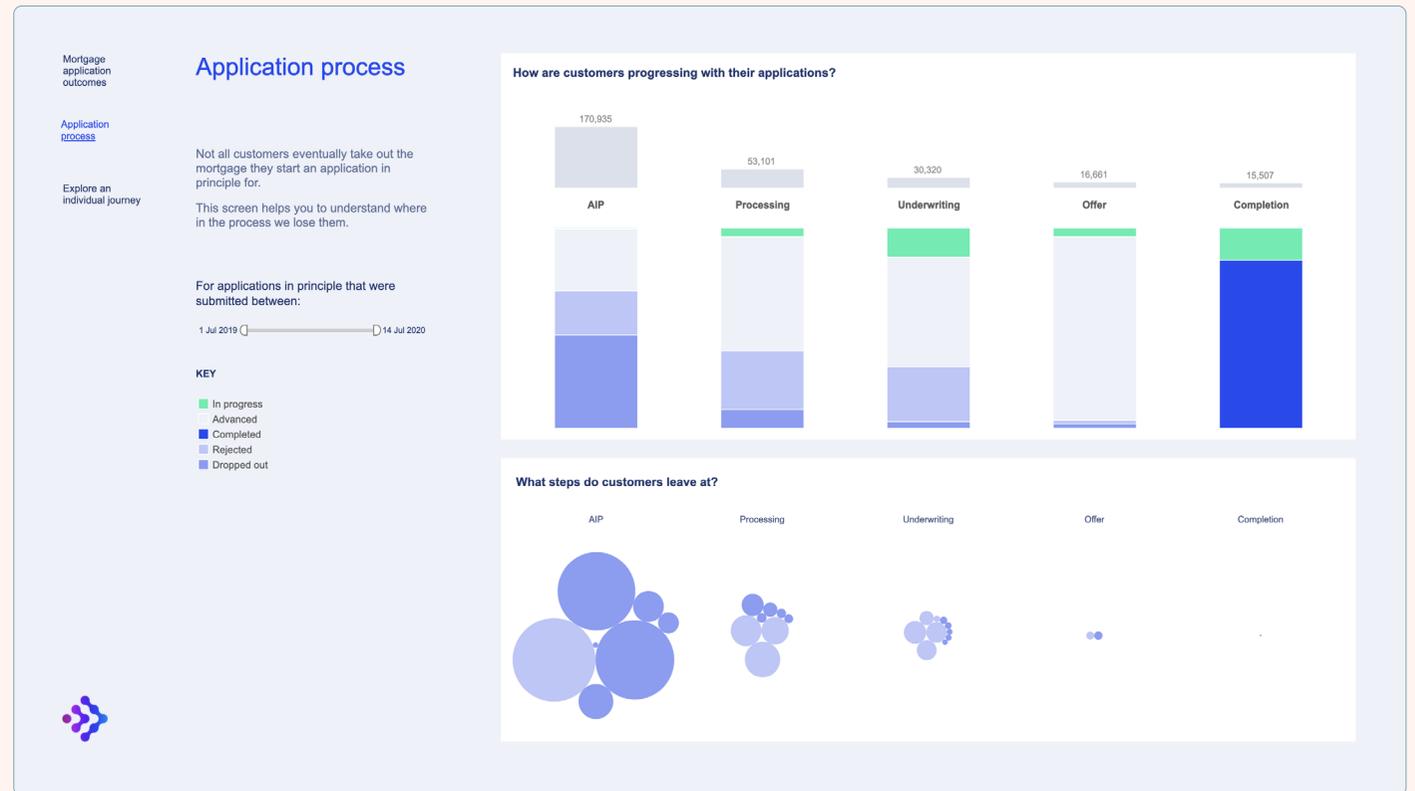
This was my first attempt, using a dataset of early Covid vaccinations. I was trying to encourage people to experiment with colour beyond defaults. I'm not entirely sure it works in this example though!

A view to check application volumes (customers starting a journey), enable reporting against targets (customers completing a journey) and understand customer demographics at a high level.



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At a bit more detail we can see customer progress through stages of a journey. This would be more useful with additional contextual information to indicate potential reasons for drop out or rejection—potentially from an internal bank process, customer feedback, communication methods or touchpoints, broker interactions and so on.



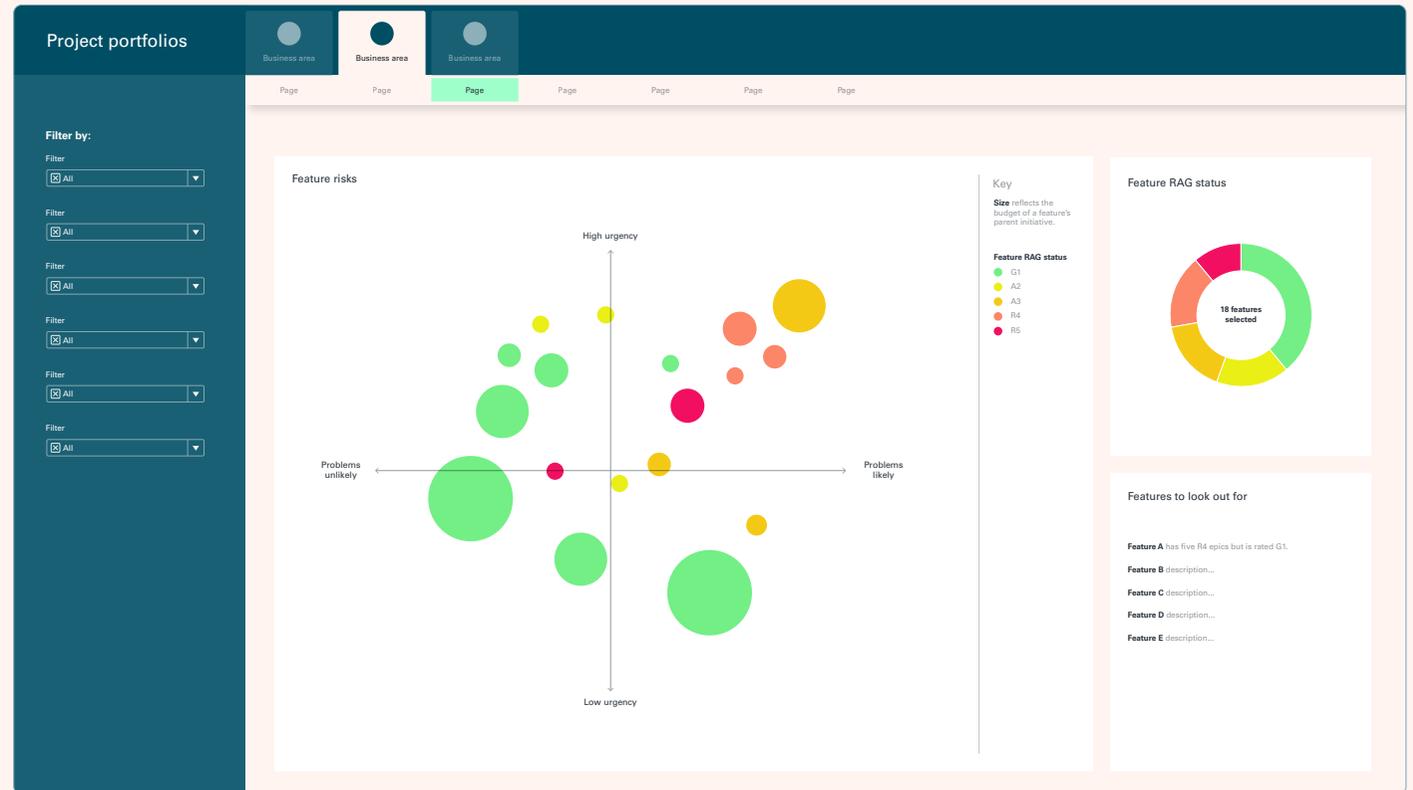
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At the more detailed end, I plotted each individual customer journey through the mortgage application process. This could link into a single customer view or help a service team to understand a customer's experience if they speak with them at some point during the process.



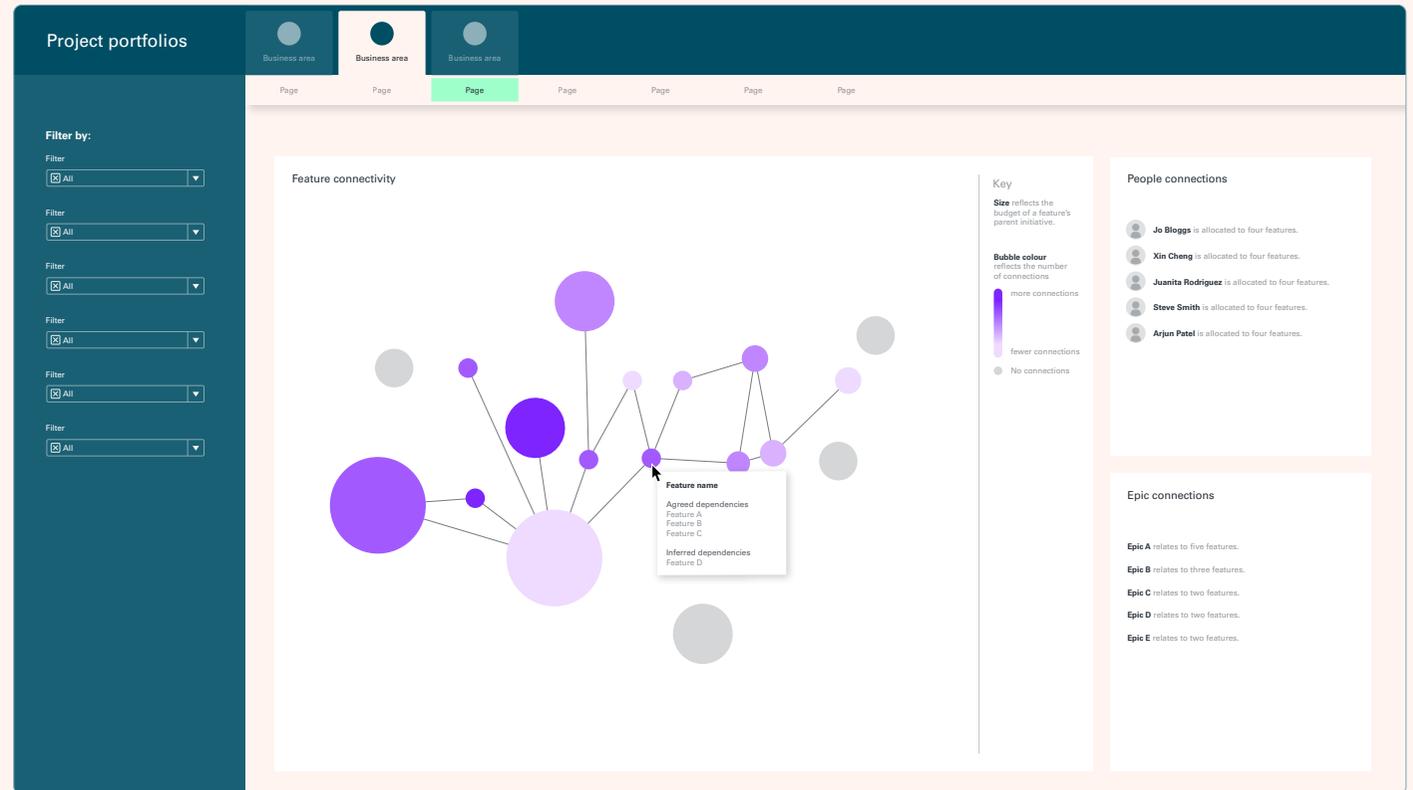
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This view is to help leads understand which projects need most attention. The “problems likely” axis is the data-led grading built on Jira data, compared with the colour RAG statuses given by project leads. This enables both improvement of the algorithm, and revision of human ratings where discrepancies arise to improve overall data quality.



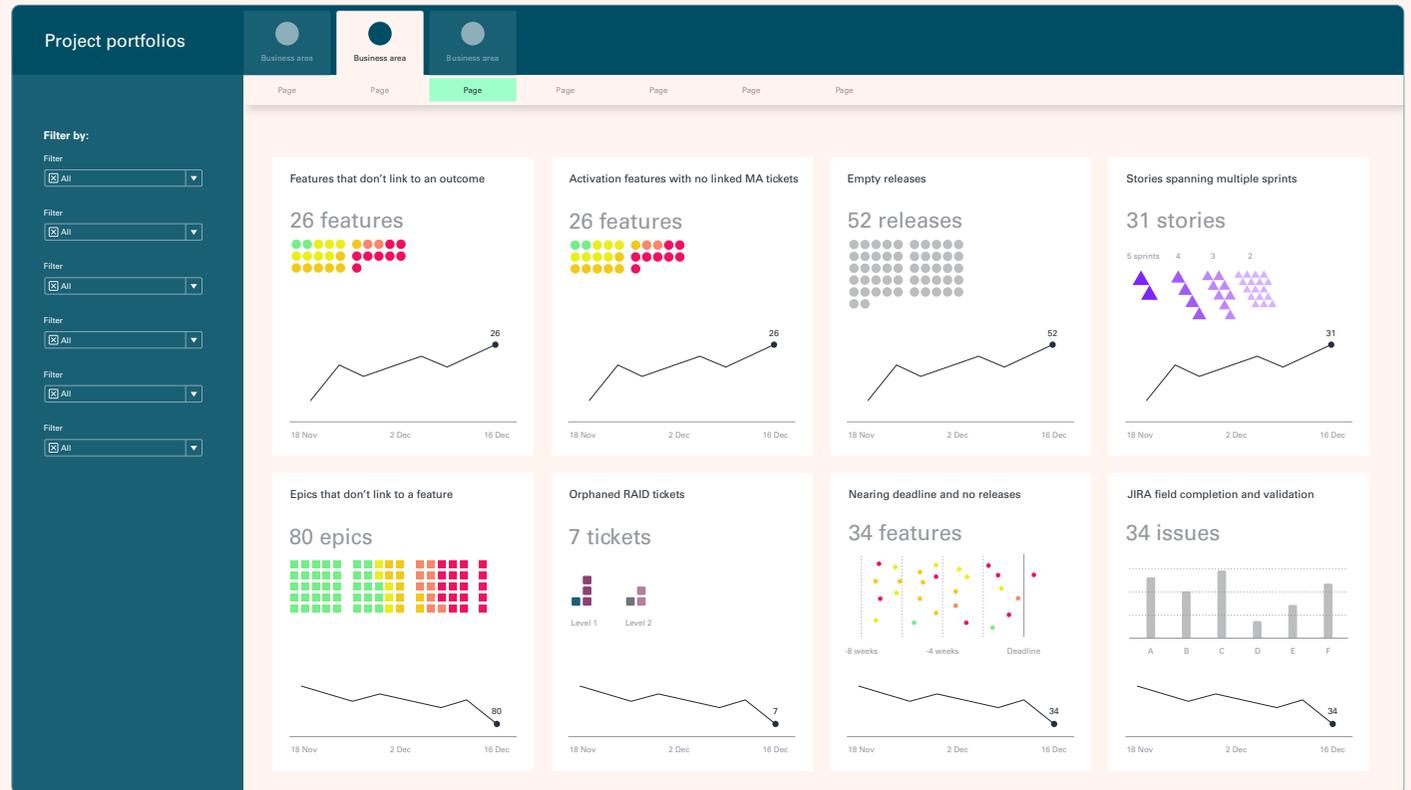
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The hypothesis was that many projects are delayed by a feature or part of a feature being dependent on another, including people being spread too thinly across multiple features, but the extent of this was unknown. The network diagram would probably be too complex for most users, but they can filter to the features that are relevant for them easily.



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This screen enables project leads to see progress towards new ways of working with Jira by highlighting areas that might need to be updated, or where people might need to adapt their use of Jira. This would ultimately help to improve data quality and make the tool much more valuable over time.



Click thumbnail to enlarge image

Other views would link to a feature-specific view, to pinpoint aspects of the project that could cause problems to other features. It would also link to defined risks and blockers, to be discussed in regular governance meetings.

The dashboard displays a feature name overview on the left and a main timeline view on the right. The timeline includes sections for 'Feature name timeline', 'Feature dependencies', and 'Other connections'. A 'Feature name risk position' chart shows a green dot in the 'High urgency' and 'Problems unlikely' quadrant. Below the timeline are two tables: 'Feature dependencies' and 'Other connections', both listing features, objects, RAG status, and dates. A 'Feature risks and blockers' table lists items with L1 B and L1 R status, assignees, keys, and next update dates.

Feature name
Key, short description, market key
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea

Status In progress
Feature RAG A3
Start date 3 Sep 2019
End date 31 Mar 2020
Needed by 6 Dec 2019

Filter connections by:
Connection type: All
Connection RAG: All

Feature name timeline
Deadline: RAG epics/stories
Due date: risks and blockers
Market activation
Historic deadline
Historic deadline
Deadline 6 Dec (moved 24 Oct)
alpha beta go-live

Feature name risk position
High urgency
Problems likely
Problems unlikely
Low urgency

Feature dependencies

Feature	Object	RAG	Dependency type	Due date	Team lead
Feature name	Epic	■	Type	Date	Name
Feature name	Story	▲	Type	Date	Name
Feature name	Epic	■	Type	Date	Name
Feature name	Story	▲	Type	Date	Name
Feature name	Epic	■	Type	Date	Name
Feature name	Story	▲	Type	Date	Name
Feature name	Epic	■	Type	Date	Name
Feature name	Epic	■	Type	Date	Name

Other connections

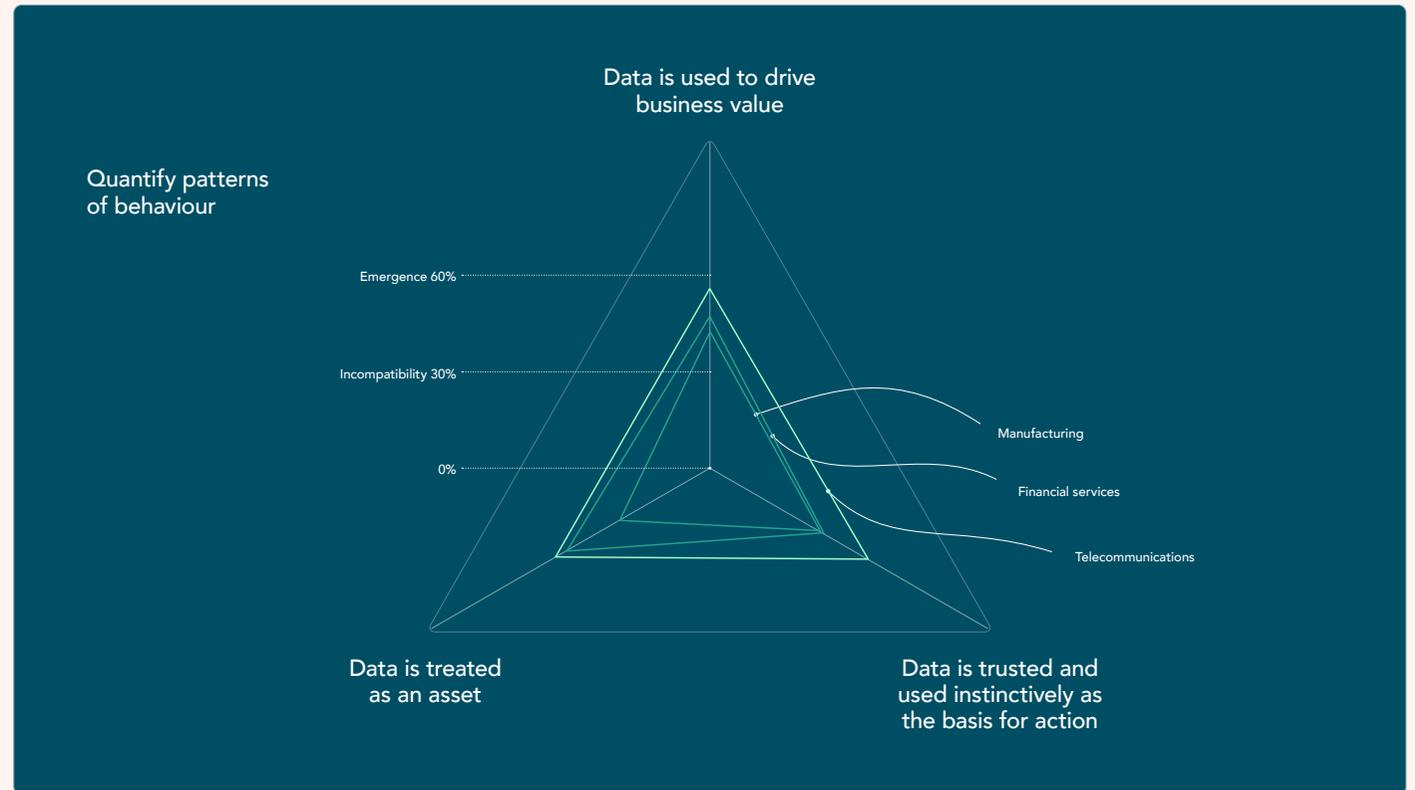
Feature	Object	RAG	Connection type	Due date	Team lead
Feature name	Epic	■	Type	Date	Name
Feature name	Object	▲	Type	Date	Name
Feature name	Object	■	Type	Date	Name
Feature name	Object	▲	Type	Date	Name
Feature name	Object	■	Type	Date	Name
Feature name	Object	▲	Type	Date	Name
Feature name	Object	■	Type	Date	Name
Feature name	Object	■	Type	Date	Name

Feature risks and blockers

Type	Assignee	Key	Next update
L1 B	Name	123-ABC	4 Dec
L1 B	Name	123-ABC	2 Jan
L1 R	Name	123-ABC	8 Dec

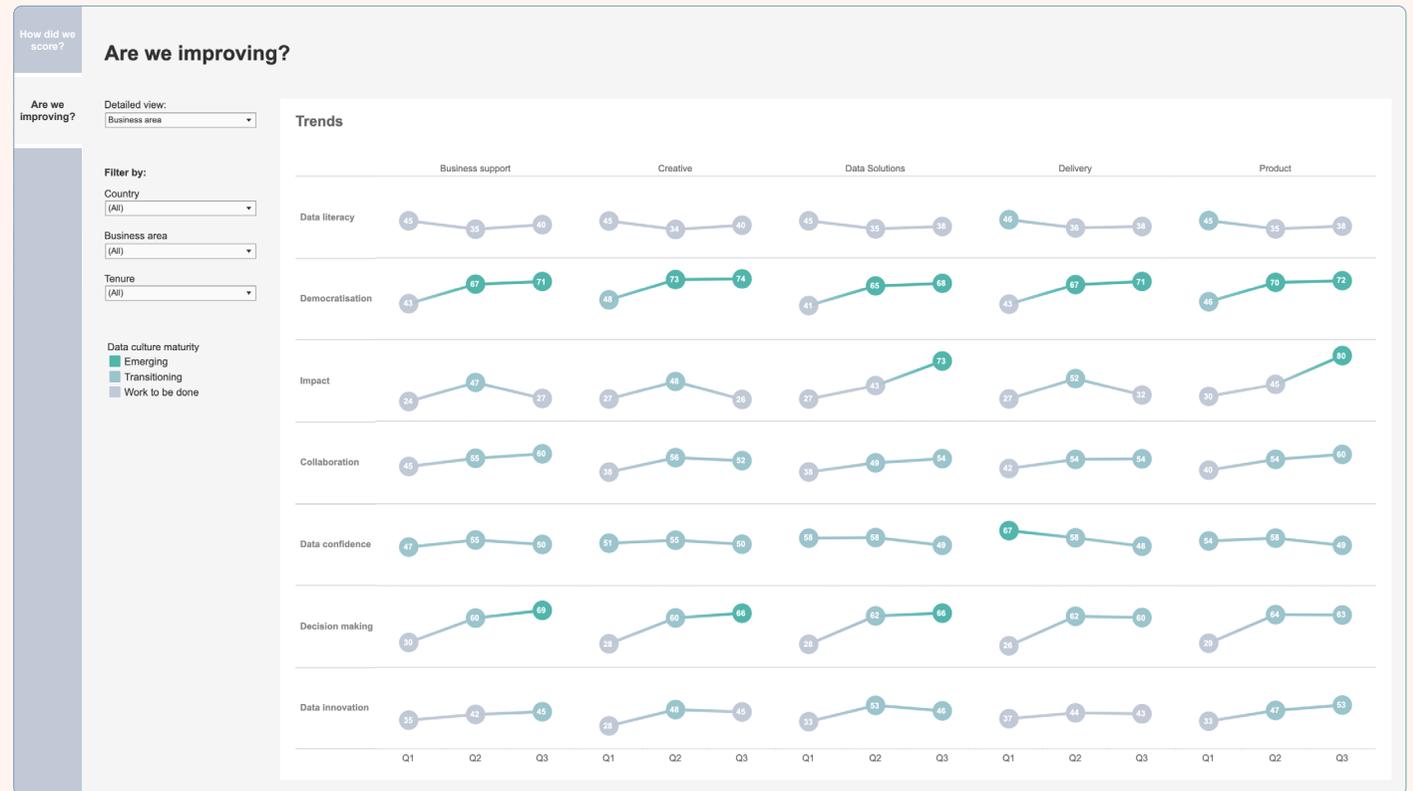
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I would work with the business to understand how they would expect people to be using data, and define behaviours that would demonstrate these expectations. These would map to varying degrees to three overarching data behaviours and could be plotted to give an overall shape of the current situation from which to measure progress over time.



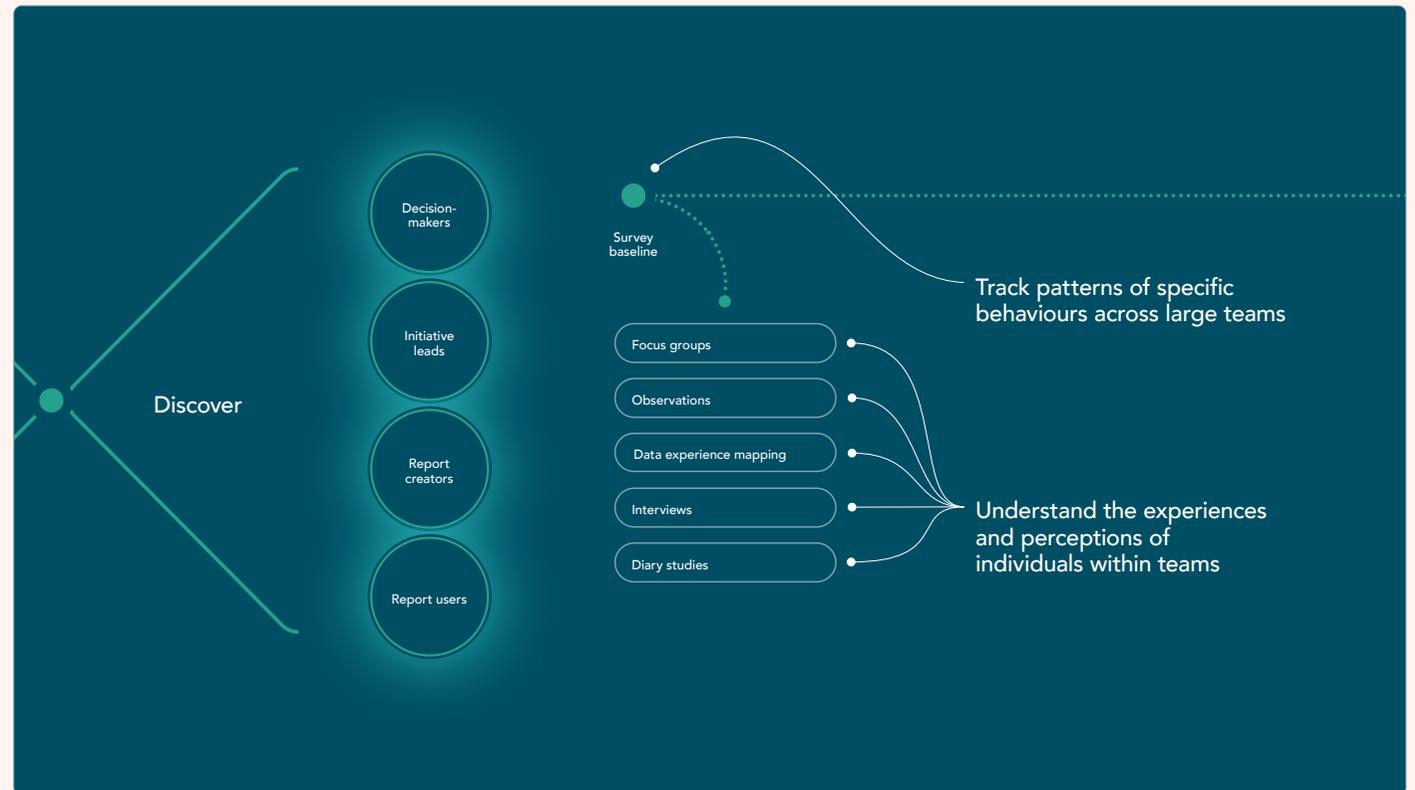
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To measure behaviours, I would design a survey to avoid people guessing which result is most desirable, and focus on what they see rather than what they themselves do. It would be conducted regularly among a wide group. Results of the survey would be easy to track over time and filter by business area to validate and improve staff engagement approaches.



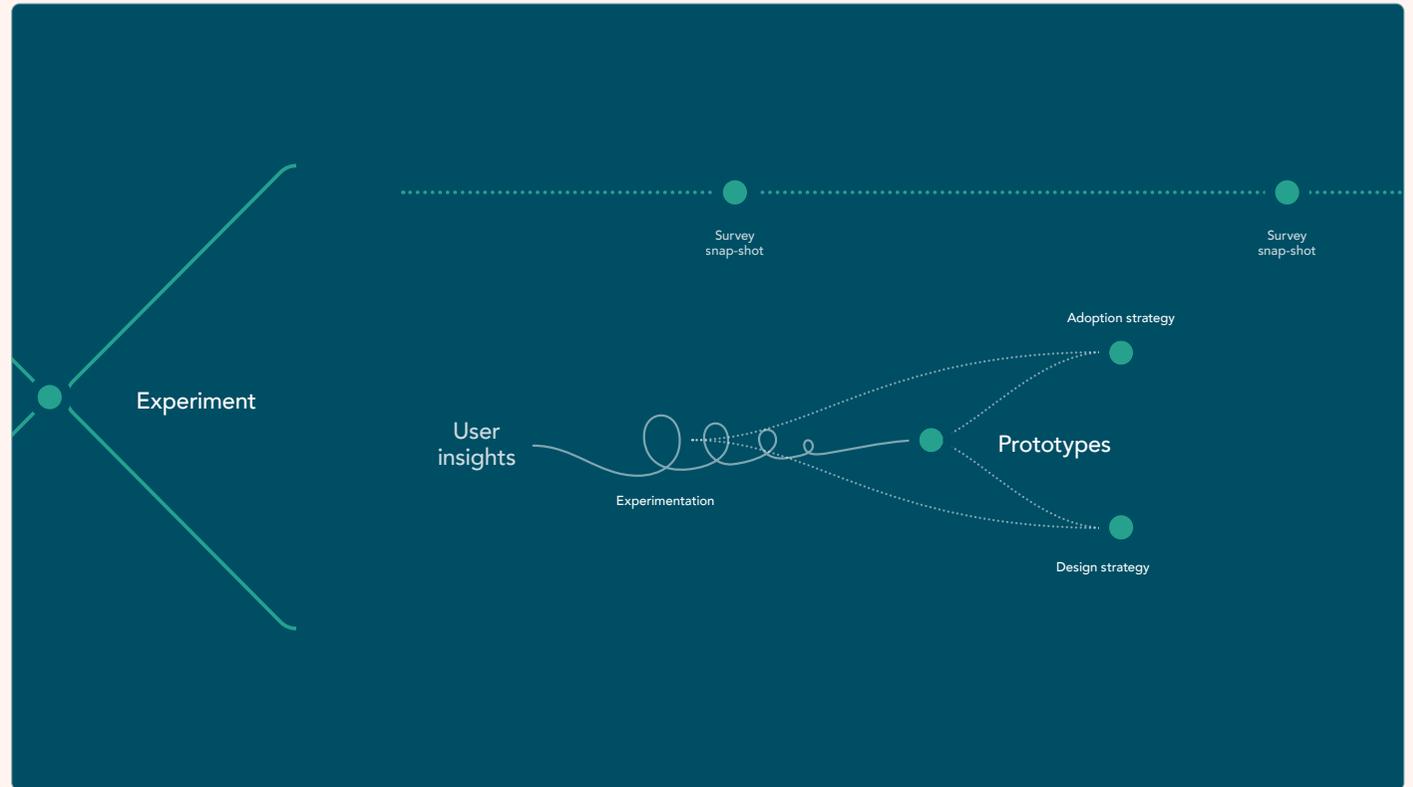
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I would focus on one team to pilot our approach, conducting research to understand how they currently use reporting and how it could be improved to better respond to their business needs. Combined with the survey of data behaviours we'd create various user profiles and start to understand key user requirements for using data in their work.



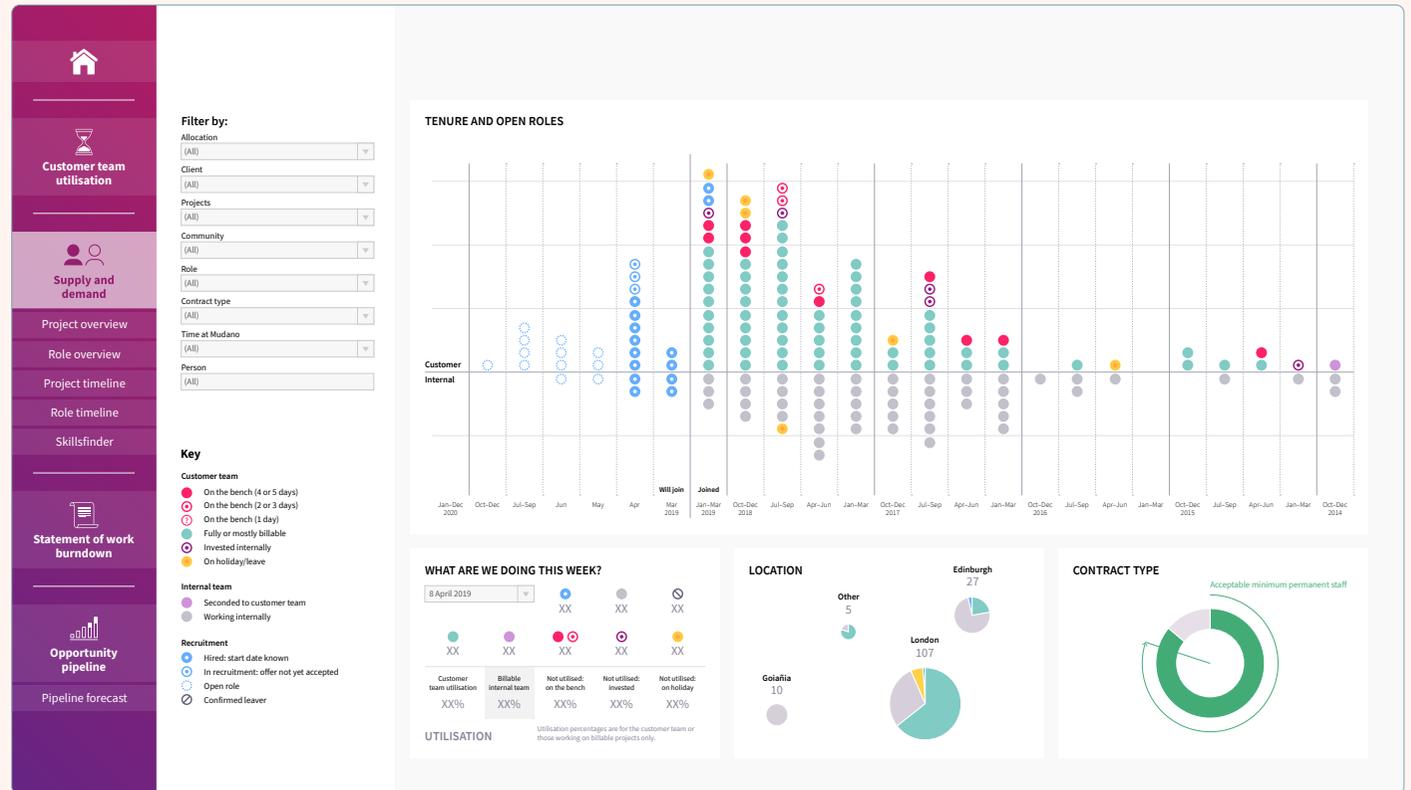
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I would run a variety of experiments, including some to prove the business value of user-centred design for reporting within this context. The prevailing aspects of these would form our design and adoption approaches that I would create with the business to democratise the process and enable long-term success beyond the pilot.



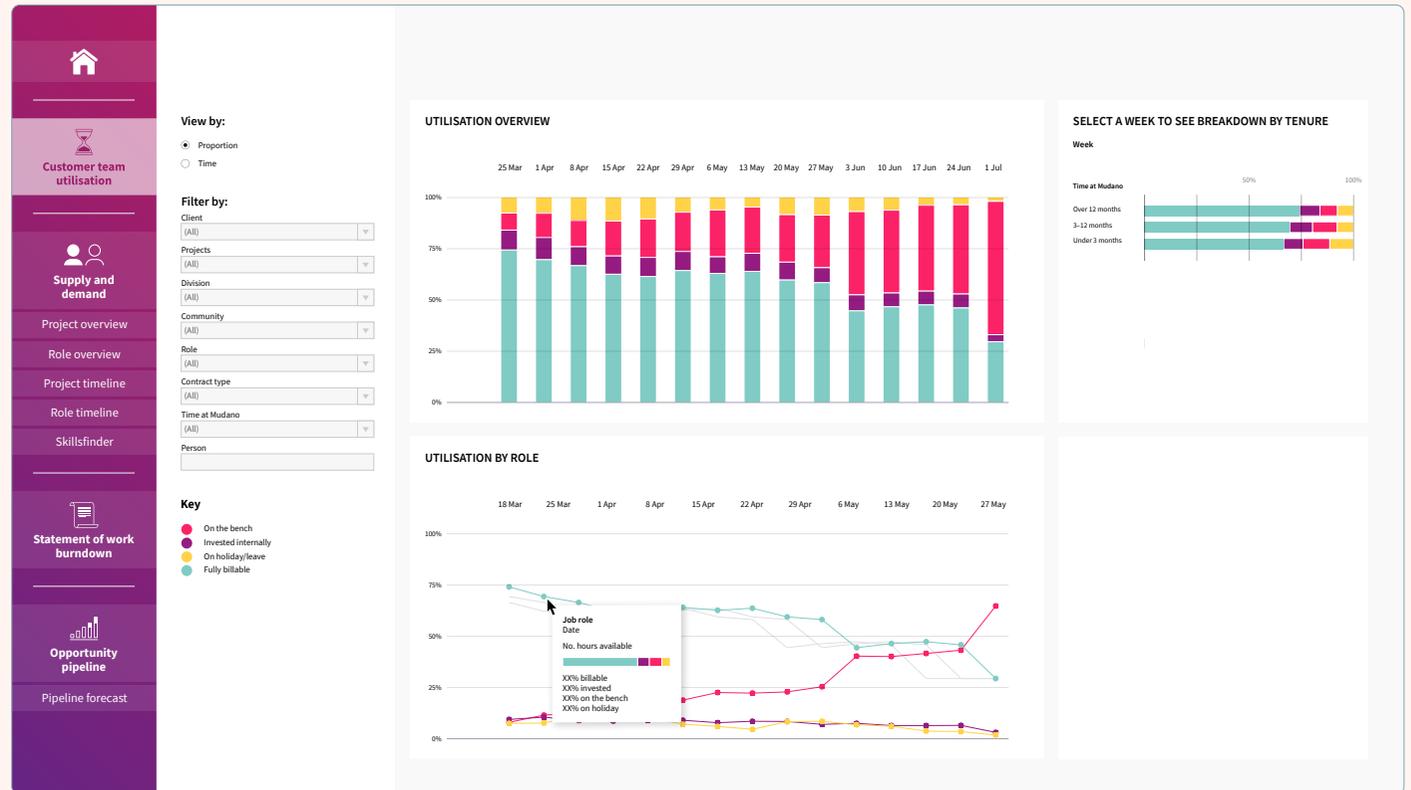
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The timeline of people's joining dates is backwards, to draw emphasis to new joiners, forming a kind of conveyor belt of people entering the company. One of the requirements was to quickly find relevant work for new people, so it was important to see how many would be joining at a time and ideally have work lined up for their first week.



Click thumbnail to enlarge image

As a small company, forecasting was really important. This view gives an idea of when projects might be expiring by the volume of people joining the bench. Utilisation by role gives a view of specific jobs roles that have different utilisation levels than others, to facilitate discussion with the recruitment team if they need to hire more or fewer people for a specific role type.



Click thumbnail to enlarge image

To match people to roles, I introduced views in both directions from a person needing a role, and an open role needing to be filled. These would automatically filter to show only relevant people or roles, instead of all available.

The screenshot displays a web application interface for managing operations. On the left is a vertical sidebar with navigation options: Home, Customer team utilisation, Supply and demand, Project overview, Role overview, Project timeline, Role timeline (highlighted), Skillsfinder, Statement of work burndown, Opportunity pipeline, and Pipeline forecast.

The main content area is divided into three sections:

- Filter by:** A section with dropdown menus for Open role, Client, Projects, Community, Role, Contract type, Time at Mudano, and Person.
- Key:** A legend defining symbols for Customer team (On the bench for 4 or 5 days, 2 or 3 days, 1 day), Fully or mostly billable, Invested internally, On holiday/leave, Internal team (Seconded to customer team, Working internally), and Recruitment (Hired: start date known, In recruitment: offer not yet accepted, Open role, Confirmed leaver).
- ROLE TIMELINE:** A grid showing roles (Community) and names over time (18 Mar to 27 May). A tooltip for a selected role provides details: Team: customer, Contract: permanent, Tenure: 2-6 months, Line manager: Adam Armitage, Coach: Adam Armitage, Coachees: N/A.
- SELECT A BENCHED TEAM MEMBER TO SEE PROJECTS:** A section titled "Project needed for XXX role" showing project timelines for Role and Client across the same date range.

Click thumbnail to enlarge image

To supplement high-level role descriptions we were building out a library of skills to enable more sophisticated matching and help people find roles that help them to reach their professional development goals.

The screenshot displays a 'Skillsfinder' application interface. On the left is a vertical navigation menu with options: Home, Customer team utilisation, Supply and demand, Project overview, Role overview, Project timeline, Role timeline, Skillsfinder (highlighted), Statement of work burndown, Opportunity pipeline, and Pipeline forecast.

The main content area is divided into three sections:

- Filter by:** Includes dropdowns for 'Required skills (expert or master level - 4+)', 'Desired skills (experienced user - 3+)', 'Skill group' (set to 'Coding'), 'Division', 'Community', 'Role', 'Contract type', 'Time at Mudano', and 'Person'.
- Key:**
 - Customer team:** On the bench (full-time) in red, On the bench (part-time) in pink, Fully billable in teal, Invested internally in light blue, On holiday/leave in yellow.
 - Internal team:** Seconded to customer team in purple, Working internally in grey.
 - Confirmed leaver:** Indicated by a circle with a slash.
 - Number of skills at that level within the skill group:** Represented by dots of varying sizes: 1 (smallest), 2-4, 5-10, and 11+ (largest).
- Skill Matrices:** Three matrices are shown for 'EXPERT OR MASTER (4+): CODING', 'EXPERIENCED (3+): CODING', and 'KEEN BEAN: CODING'. Each matrix has columns for skills: DAX, DB2, HTML, Javascript, Javascript D3, Linux, M, Oracle, pl/sql, PostgreSQL, Python, R, SAS, SQL, SQL Server, SVG, Teradata, and VBA. Colored dots in the cells represent individuals with those skills.
- Legend:** A list of 30 names, each with a colored dot corresponding to their skill profile in the matrices.

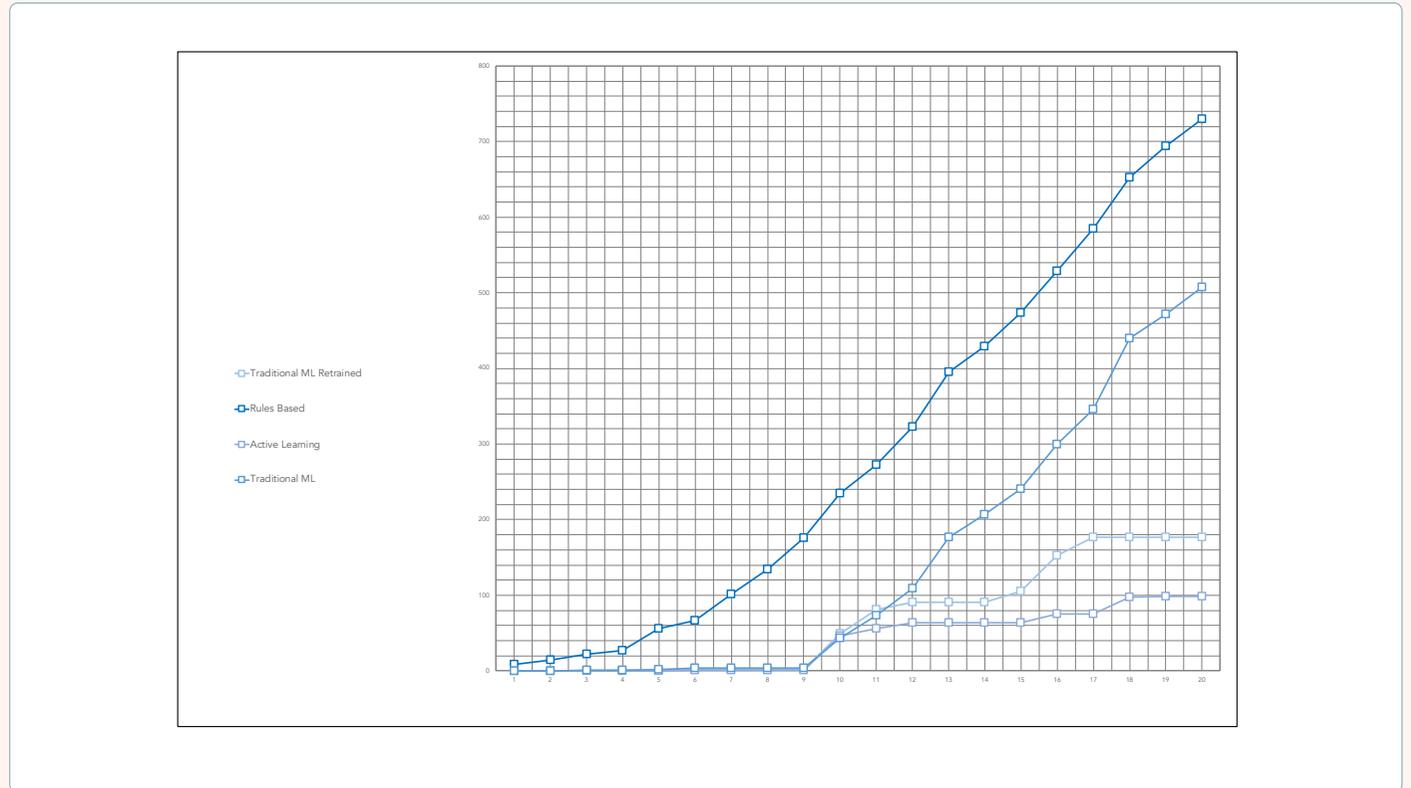
Click thumbnail to enlarge image

The situation I used for the presentation was a real test we ran using different machine learning models to propose to a client that they might want to move away from the traditional machine learning model they were currently using.

An active learning model
can be more effective
in preventing financial
crime than other machine
learning models

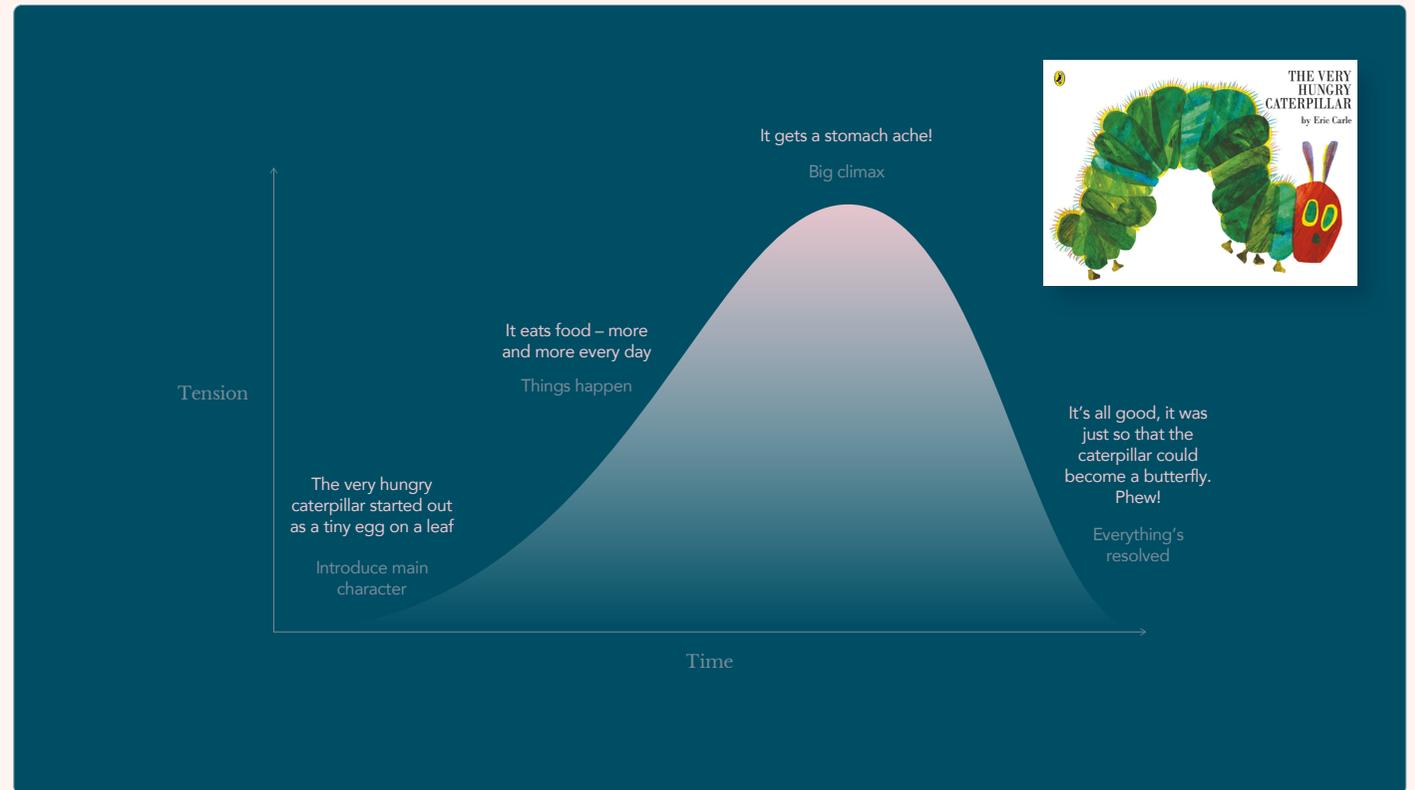
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I created a terrible graph of the data to demonstrate a potential output without any real design consideration. I then ran through a series of step-by-step improvements to the chart to show the systematic way I would go about redesigning a chart like this to more clearly tell a story.



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To explain the concept of a narrative arc I used a storybook reference my audience was likely to be familiar with. I then plotted the key points of our example story on the same arc.



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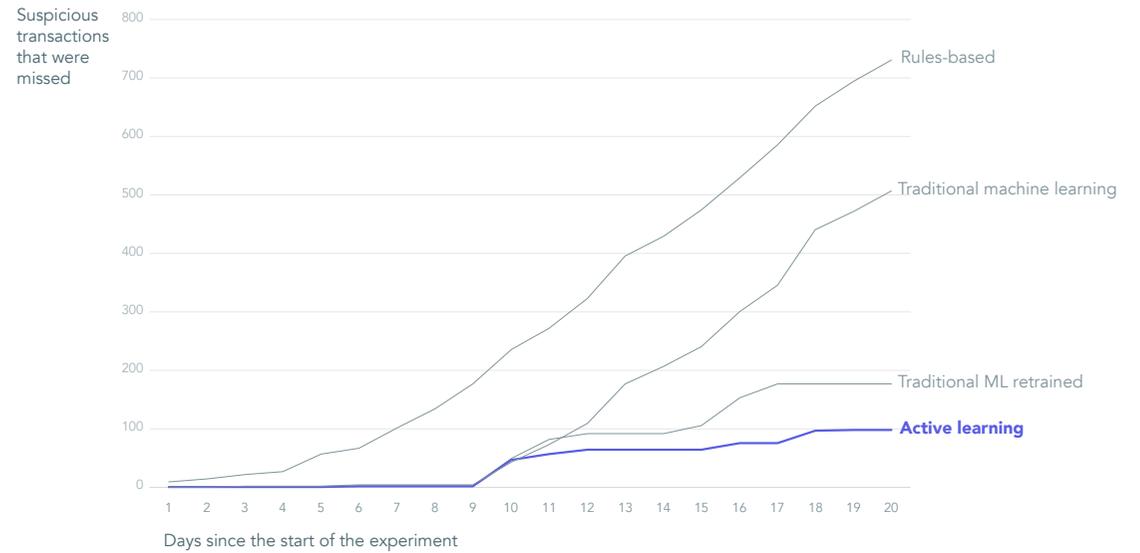
The final chart was shown in two parts to add tension to the break point on day nine when the machine learning models were set loose on previously unseen data types and monitored for how they performed.

Active learning models are quicker to adjust to unfamiliar data types, making them more effective in detecting suspicious transactions

To improve financial crime detection we ran an experiment to see how different models perform.

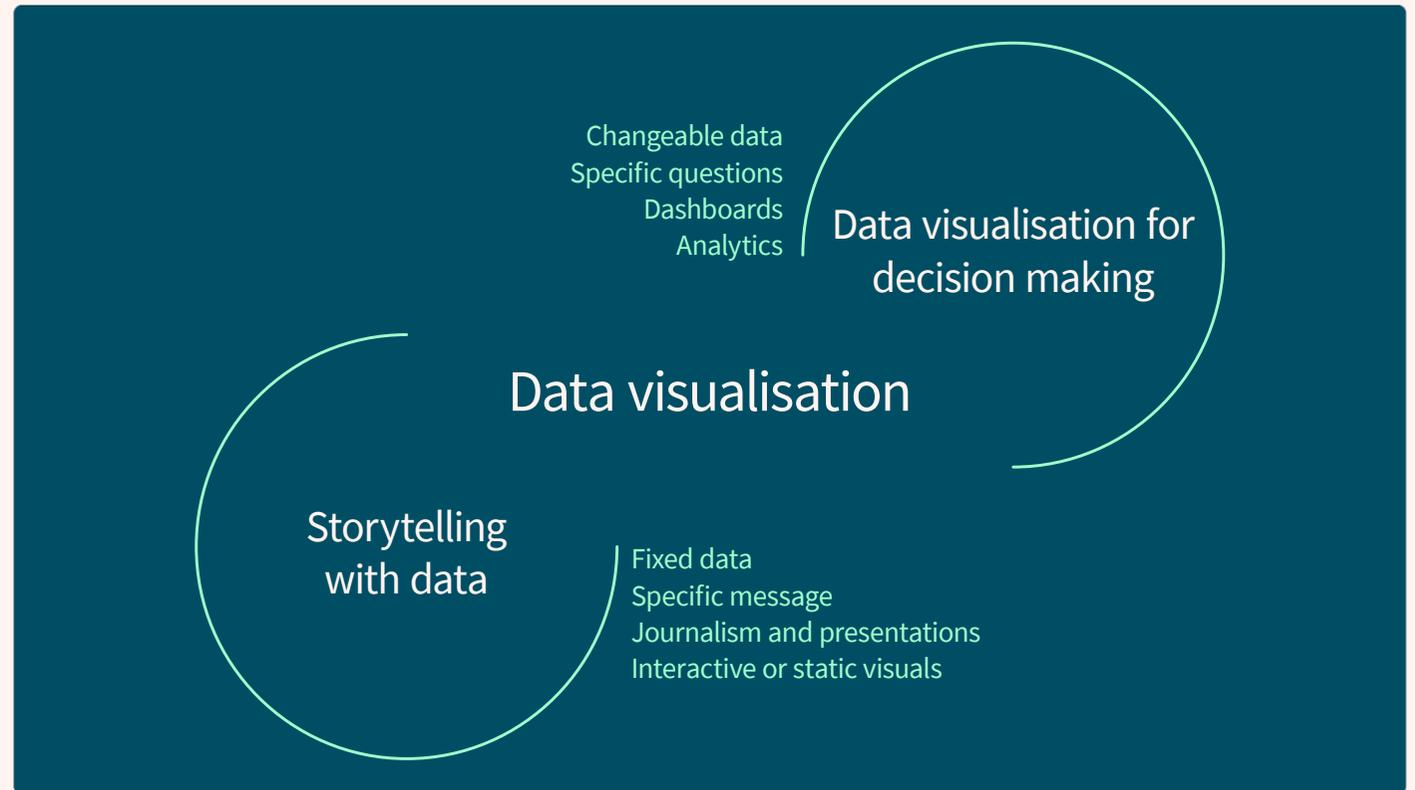
For the first eight days, they filtered a familiar type of data.

On day nine we introduced unfamiliar data types.



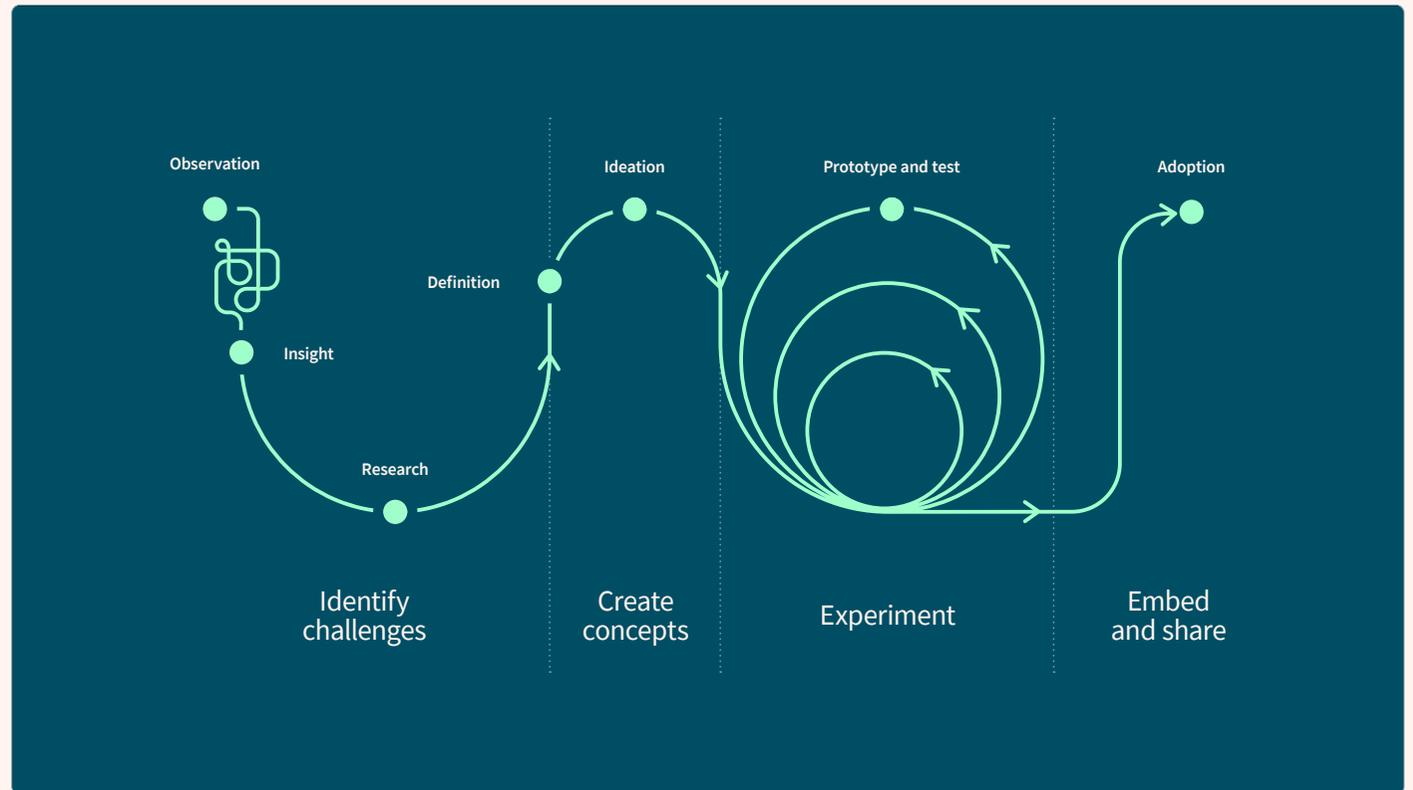
Click thumbnail to enlarge image

I started by explaining the difference in design approaches for regularly updated dashboards instead of more static reporting. Though both could use a design process as a guide, data visualisations to aid decision making require more user engagement than other types of visualisation.



Click thumbnail to enlarge image

I used three design process diagrams, including this one Mudano developed, to demonstrate that there's no singular right way to do things. And if you're in a situation where you can't start at the beginning of a process there can be ways to build in that user research and discovery at a later stage.



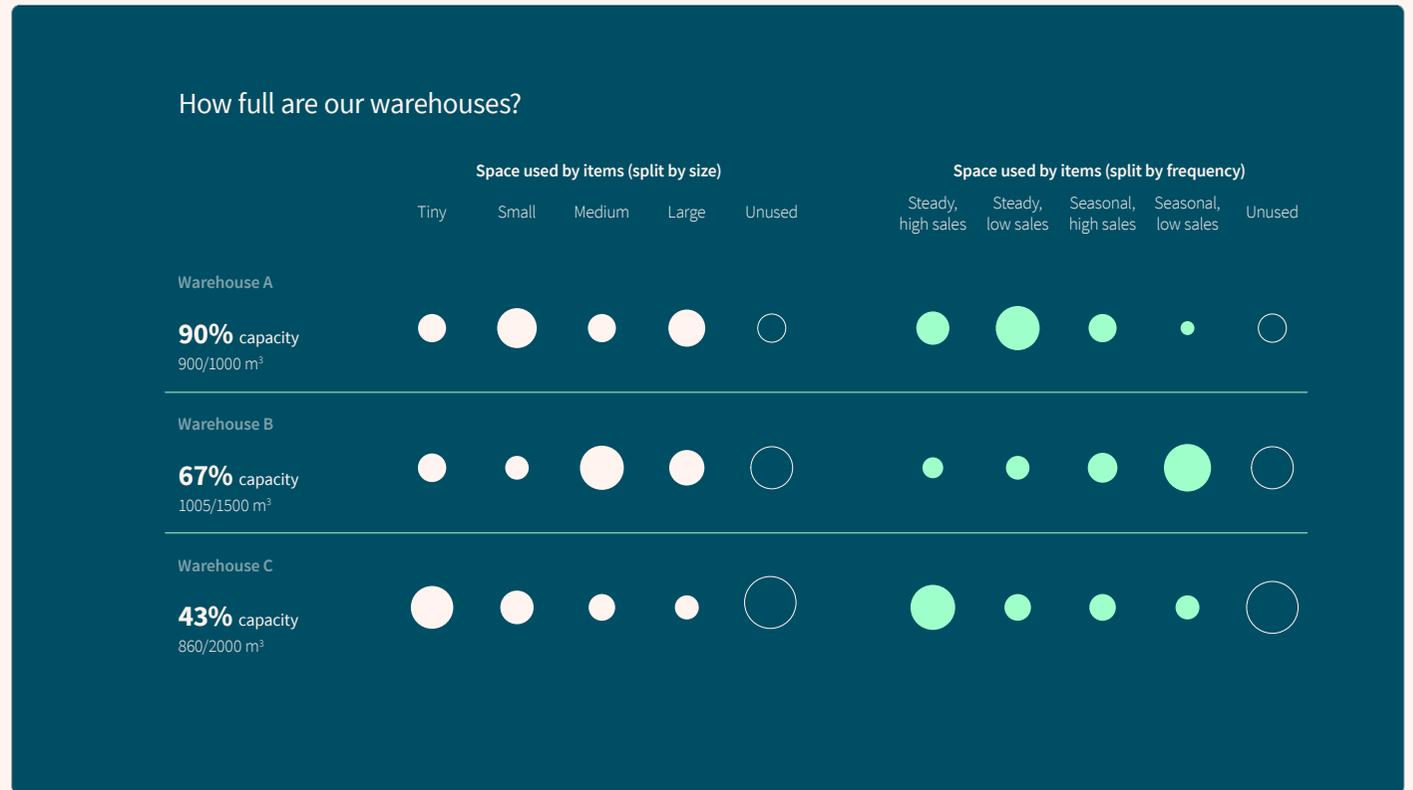
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Using a common example of a stakeholder who says they know what they want to see in a chart (in this example, sales over time data), I showed a variety of possible reasons someone might want to see that chart, and how the presentation of the data would vary depending on the kinds of decisions someone would make using that data.

“I want to see sales over time...”
“...because I want to make sure we’re making efficient use of space in our warehouses”

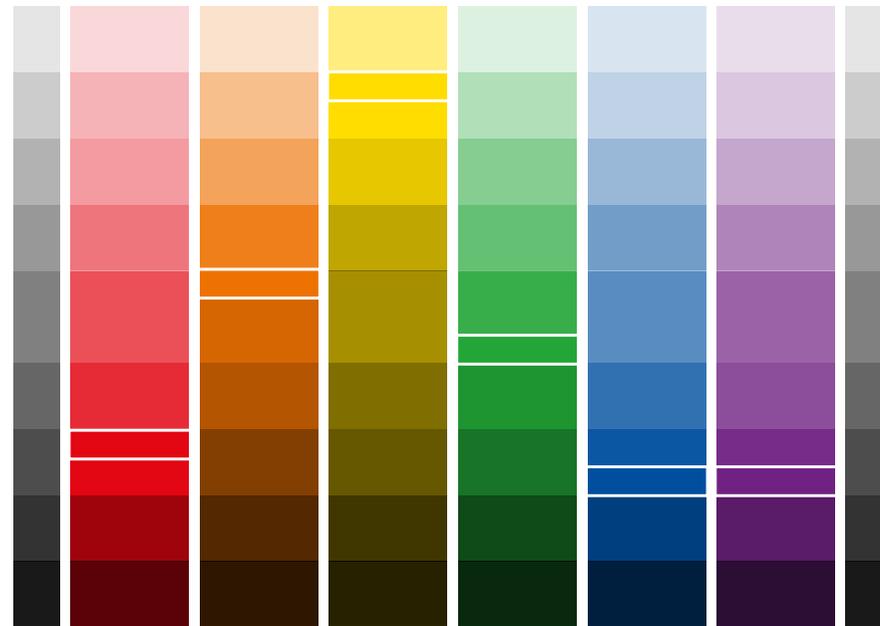
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This led to proposing a very simple dashboard as a quick alternative to the obvious line chart, to encourage the audience to think beyond the first idea they might have to see what else they could reveal using different visualisations.



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To help people choose balanced categorical colour palettes and understand why gradients work better for some hues than others, I gave an overview of colour values and characteristics, and how to draw attention using contrast.



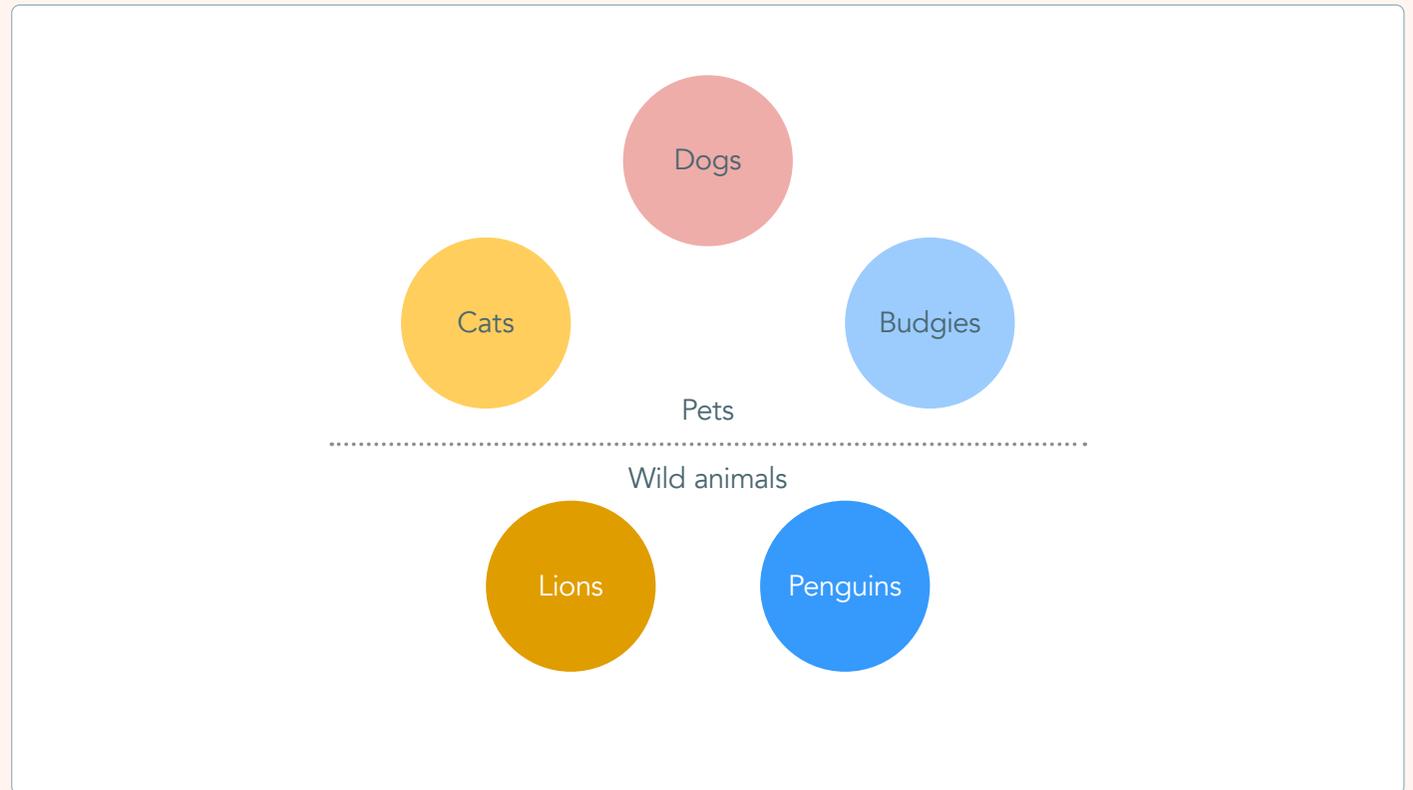
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I demonstrated how to use tools like Sim Daltonism to quickly test for accessibility for various colour deficiencies. Using this to tweak default colours for RAG statuses, bringing the focus to one end of the spectrum over the other depending on the needs of the situation.



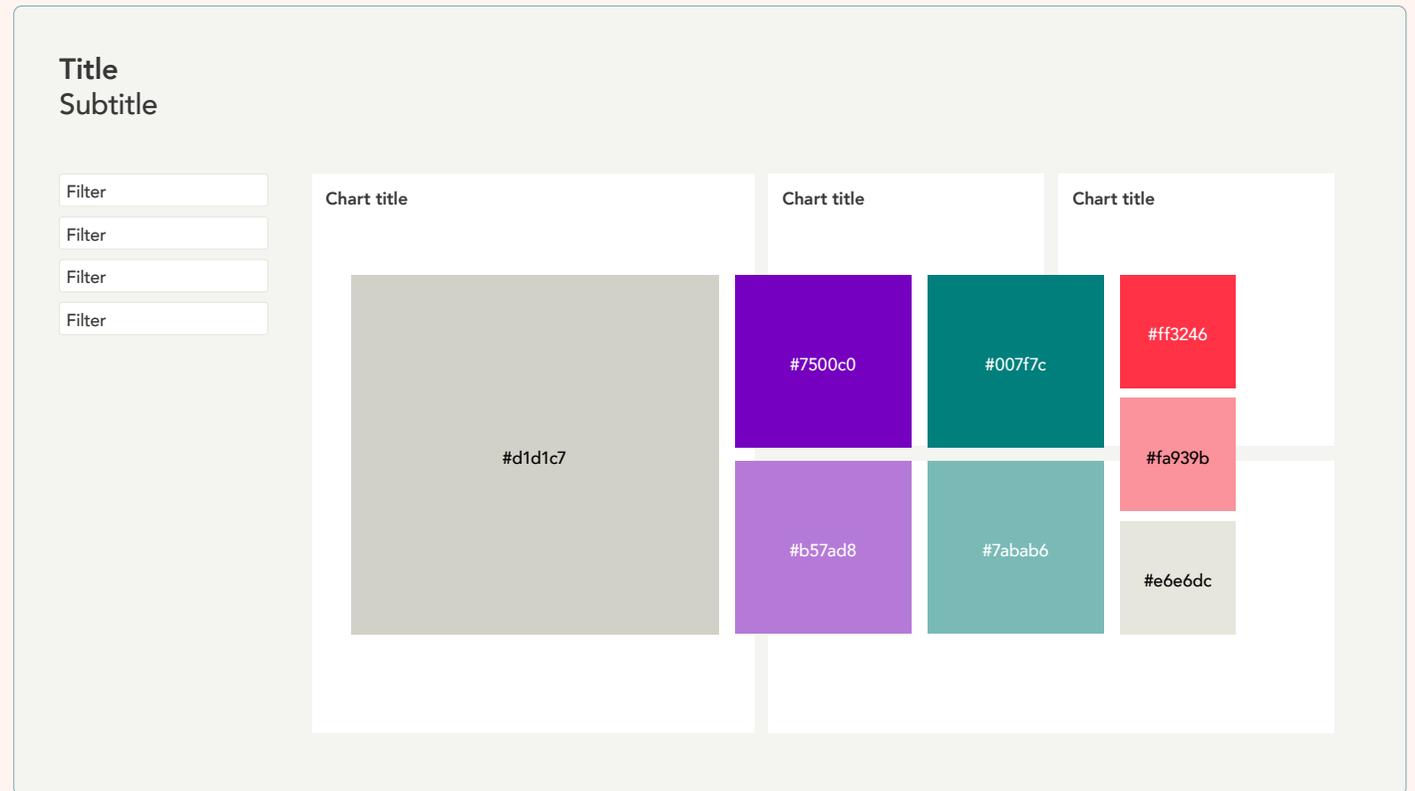
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Recognising how difficult it can be to choose completely distinct categorical colours that use contrast appropriately I worked through ways of grouping categories to make it easier. For example, animals could be grouped by family and domestic status.



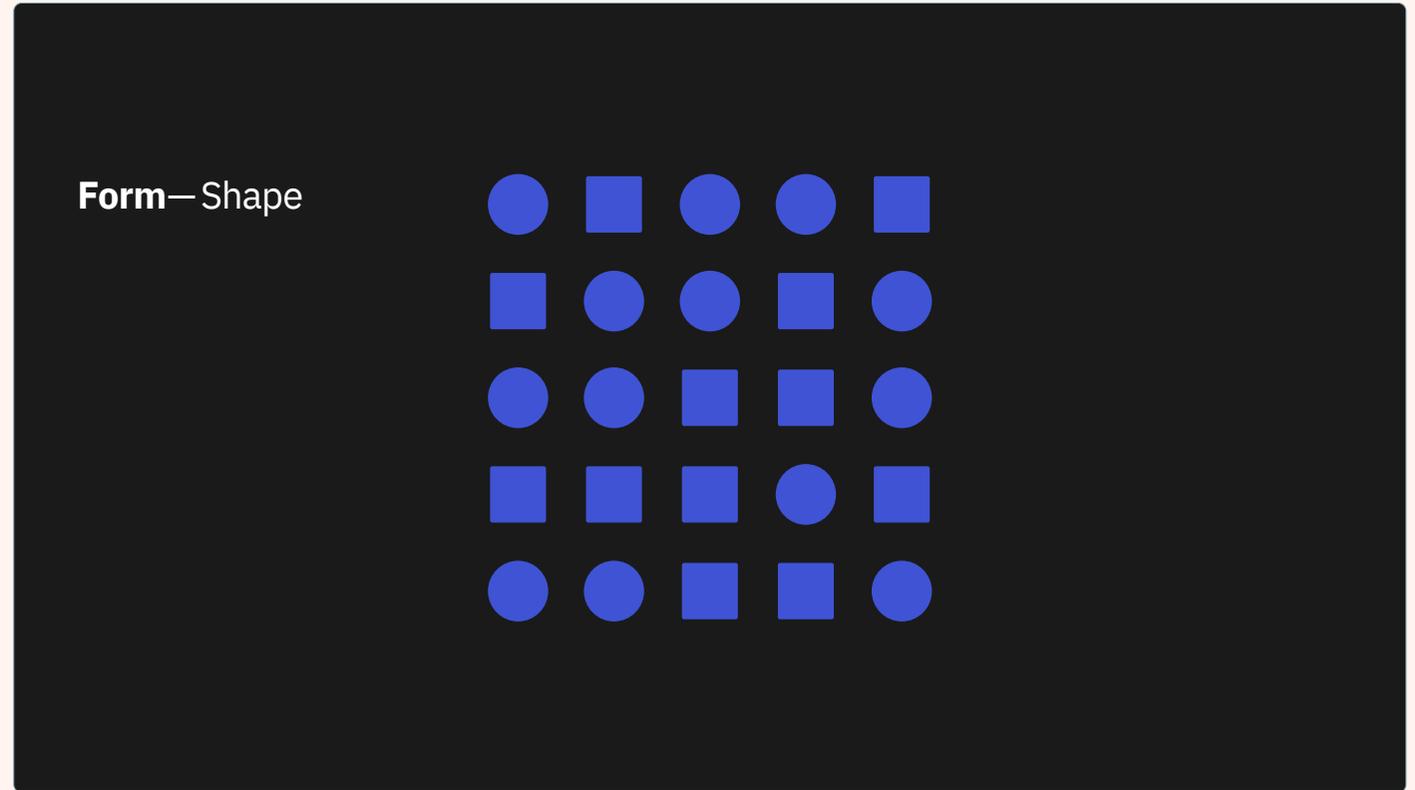
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One area that people seemed to be particularly interested in was how to use brand colours in dashboards. Though colour has a different function for branding than for information communication, I found and shared a method for selecting appropriate colours from a brand palette, using Accenture's as an example.



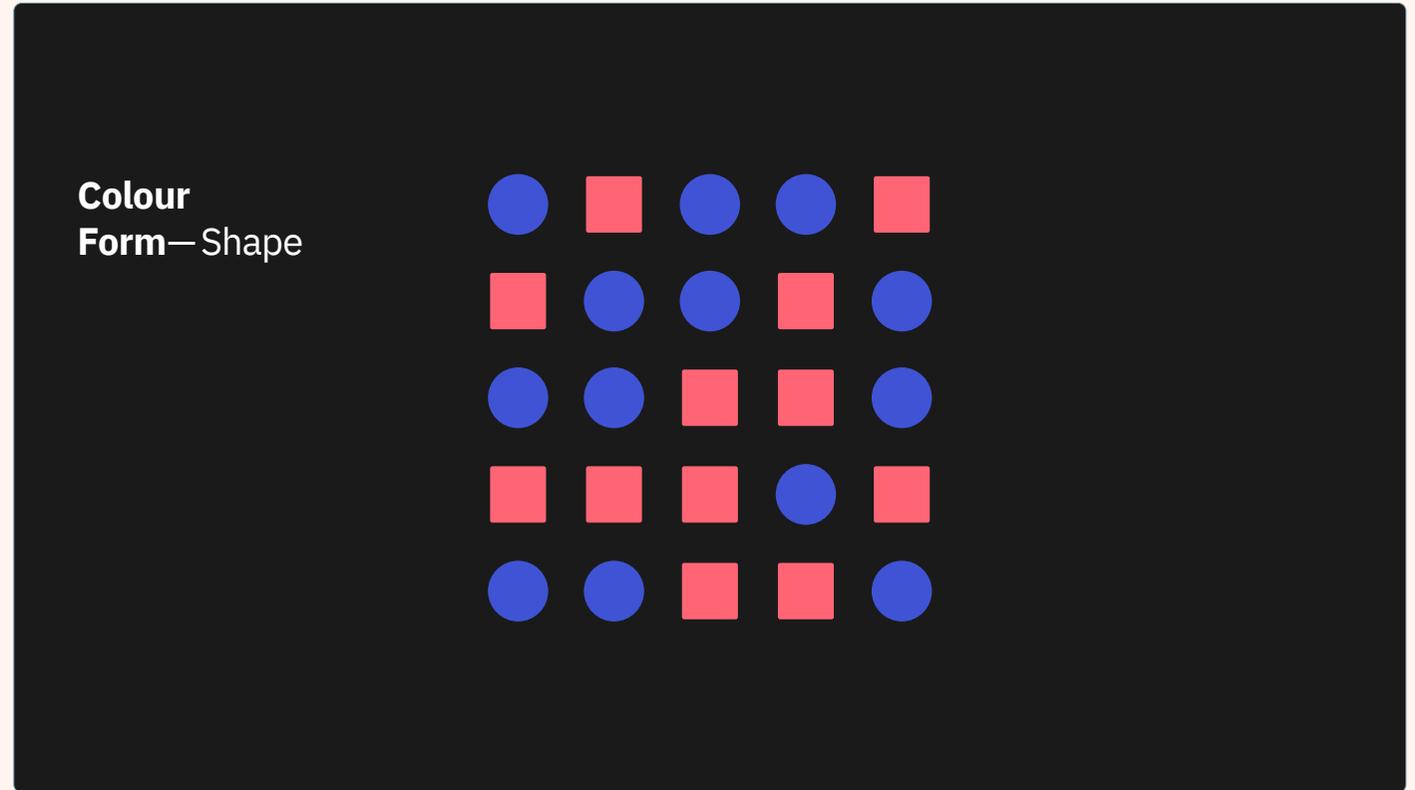
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This is one of the example diagrams I used to show how we process shape information. Within one colour we take quite a systematic approach, and can quite quickly get an estimate of proportions of each shape.



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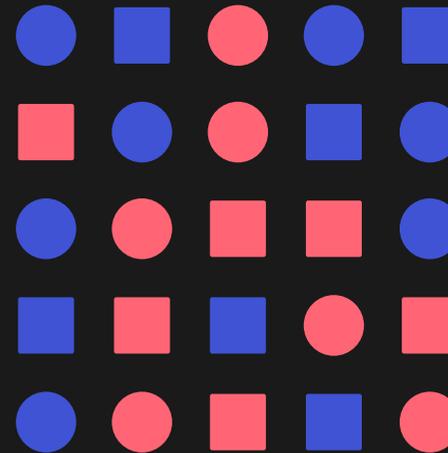
When colour reinforces the pattern given by shape we process it significantly faster than we would shape alone.



Click thumbnail to enlarge image

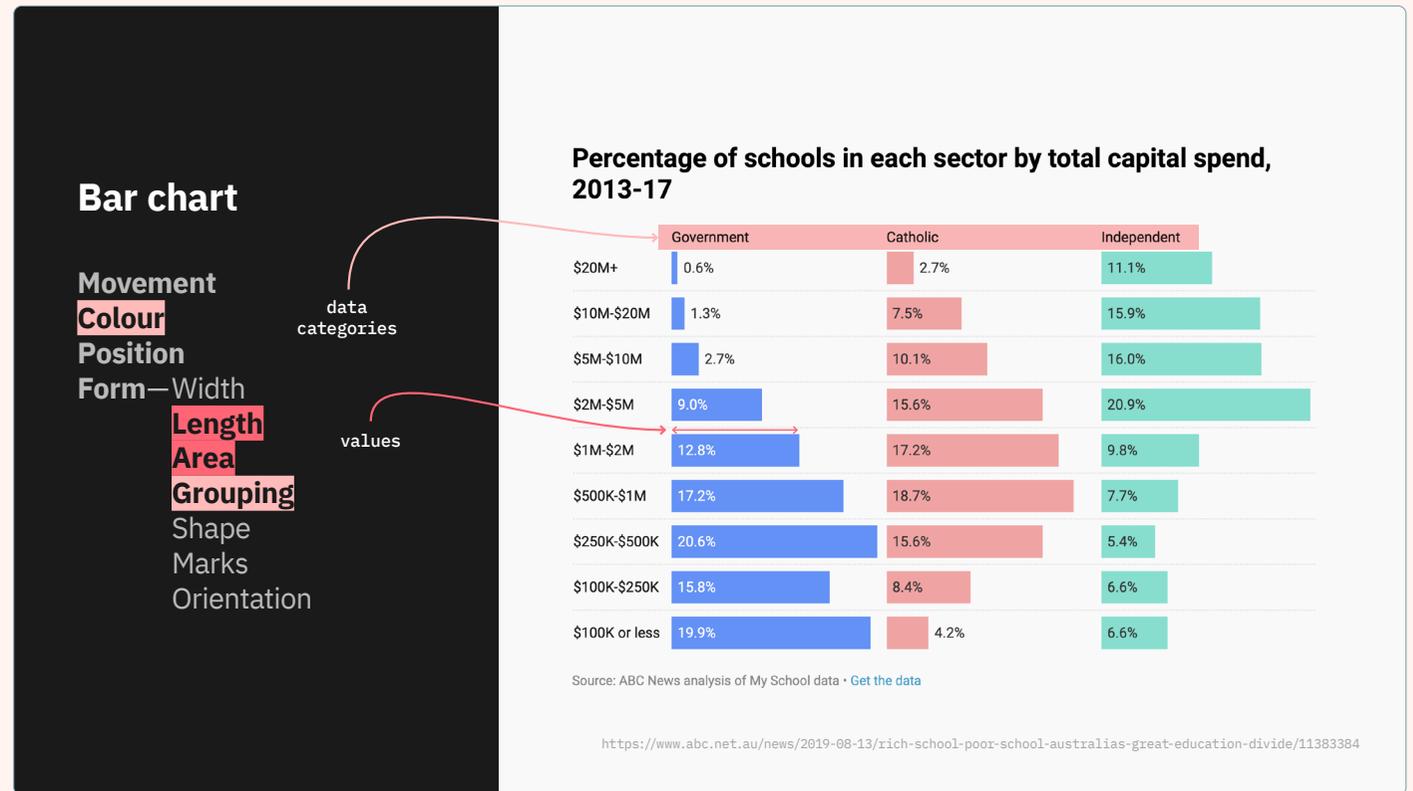
When colour adds a different dimension to the dimension encoded in shape, our processing speed significantly decreases and we are more likely to be distracted or focus just on colour. There's a really great [tool](#) to demonstrate this concept from North Carolina State University.

Colour Form—Shape



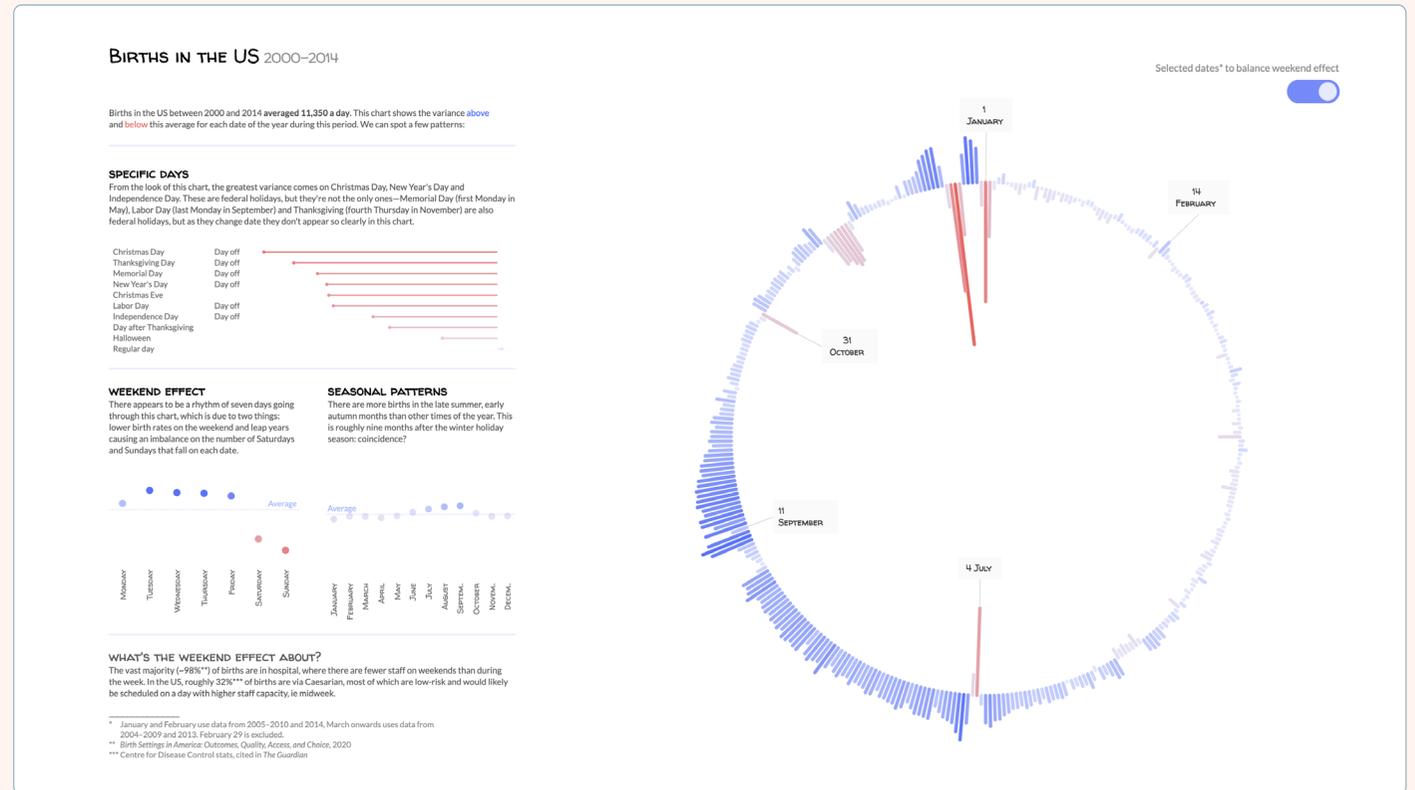
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An example of how we start to decode data from charts using preattentive processing, and why it's important to bear in mind when altering the structure of a chart of this type.



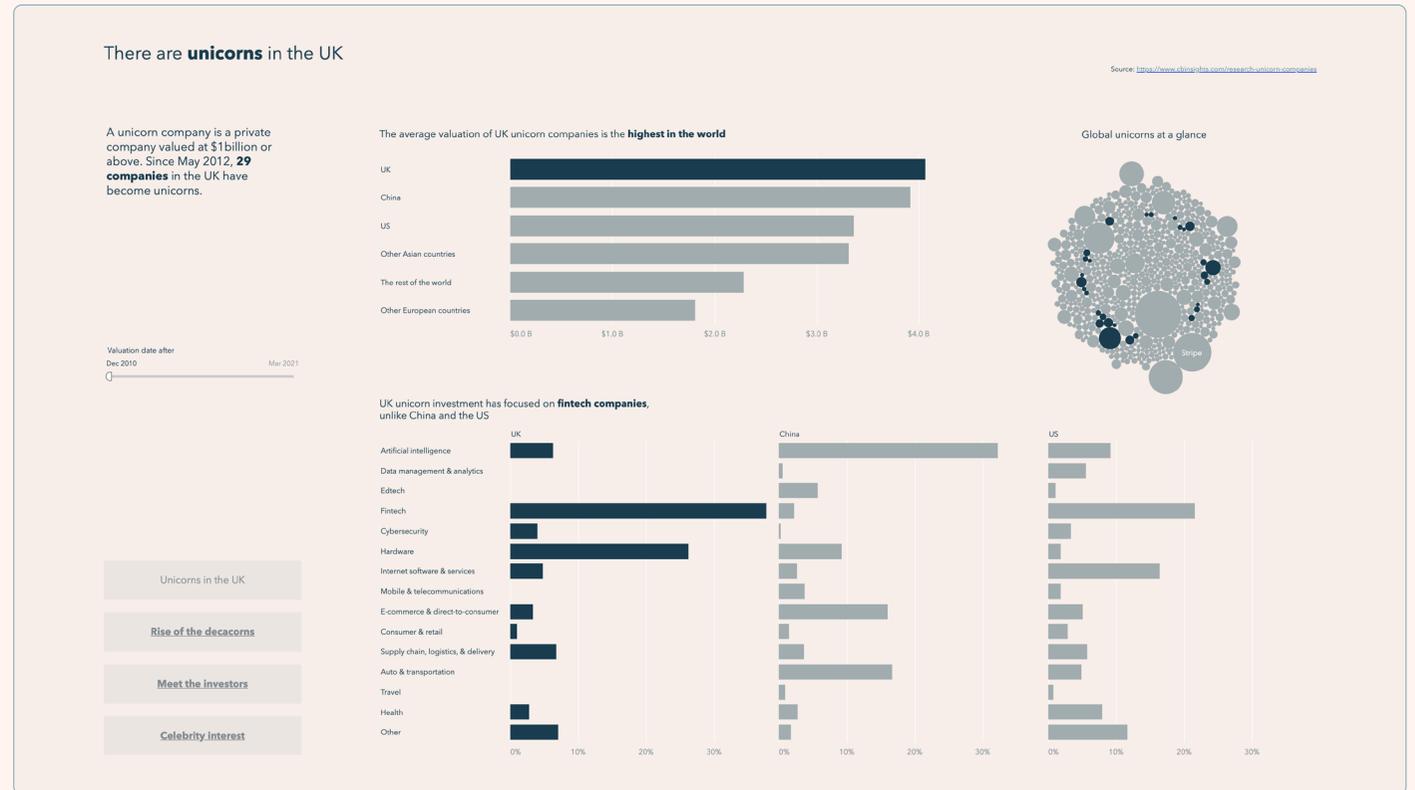
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I was inspired by Nadieh Bremer and Zan Armstrong's graphic for *Scientific American* for this visualisation that shows birth rates throughout the year. I wanted to show the value of learning from other people's design decisions.



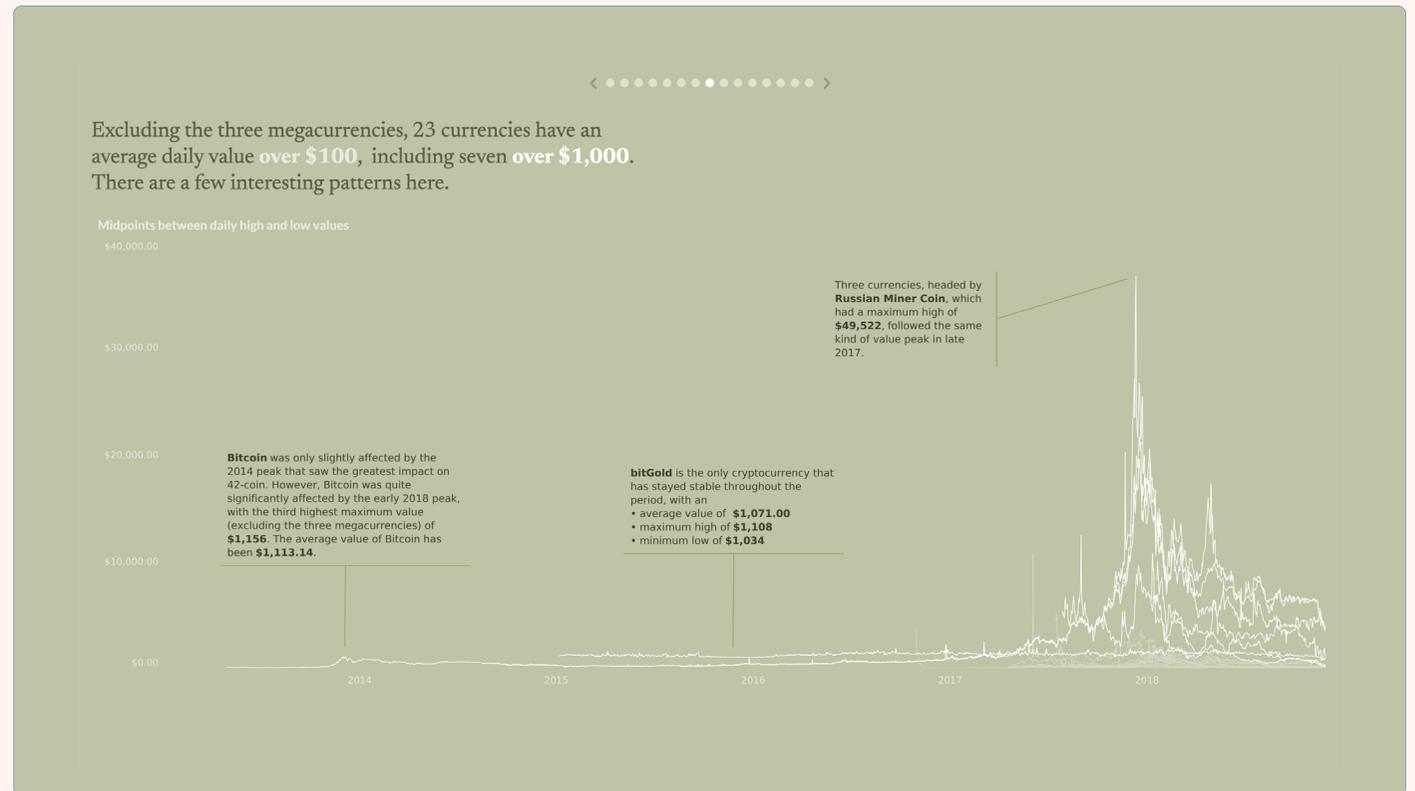
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For this dashboard about unicorn companies (private companies valued at over \$1 billion!) I used a monochrome palette to show that you don't need lots of colours to convey information effectively.



Click thumbnail to enlarge image

I wanted to show how valuable adding context can be to a visualisation to aid understanding. This presentation was a meandering tale of me trying to understand cryptocurrencies. I still don't...



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Tableau explorations

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This was my first attempt, using a dataset of early Covid vaccinations. I was trying to encourage people to experiment with colour beyond defaults. I'm not entirely sure it works in this example though!

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