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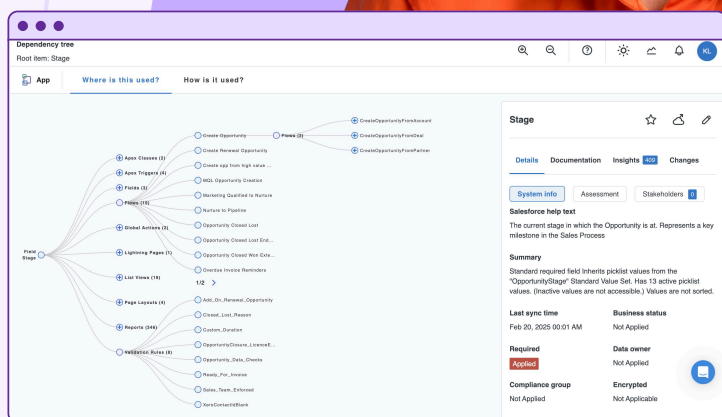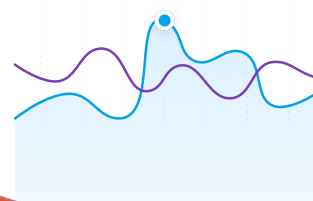## Change Intelligence Research Series

Untapped Opportunities in User Experience

Xavery Lisinski & Stephy Hogan

Executive summary

Navigating the Evolution of Salesforce User Experience

Our latest exploration into Salesforce's ecosystem, "The Change Intelligence Research Series," delves into the transformative impact of dynamic forms and Lightning Experience on user interaction and organizational efficiency. With data aggregated from Salesforce orgs, our research offers an unparalleled view into the real-world application and challenges of modernizing Salesforce environments.

How To Enhance User Experience in Salesforce?

Introduced in the Summer '20 release, dynamic forms have revolutionized how Salesforce admins and users can interact with the platform, offering customizable and contextual experiences that significantly reduce information overload and enhance usability.

Key Findings

Page Layout Complexity

Our findings reveal an average of 35.31 fields per page layout, with standard objects displaying as much as 78.74 fields on average. The Opportunity object, in particular, stands out for its excessive customization with an average of 154 fields on page layouts. Such customization results in information overload for end users and slow decision making.

Underutilization of Dynamic Forms

Despite their potential, only 17.3% of record Lightning pages utilize dynamic logic, indicating a significant opportunity for organizations to leverage these features more effectively to enhance user experience and operational efficiency.

Unlocking the Potential

Our research not only highlights current challenges but also points to a vast untapped potential within the Salesforce ecosystem. By embracing dynamic forms, Lightning Experience, and best practices in user experience design, organizations can dramatically improve their Salesforce ROI and user satisfaction.

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Authors

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VP of Product, Elements.cloud

Xavery is spearheading the development of the leading Change Intelligence Platform for Salesforce ecosystem. Under his leadership, the product team at Elements has increased release frequency by 800%, introducing many innovative solutions that notably improve productivity by as much as x541.

Xavery shares insights on product management and development on his blog and is the author of "Total Story Visualization" analysis technique.
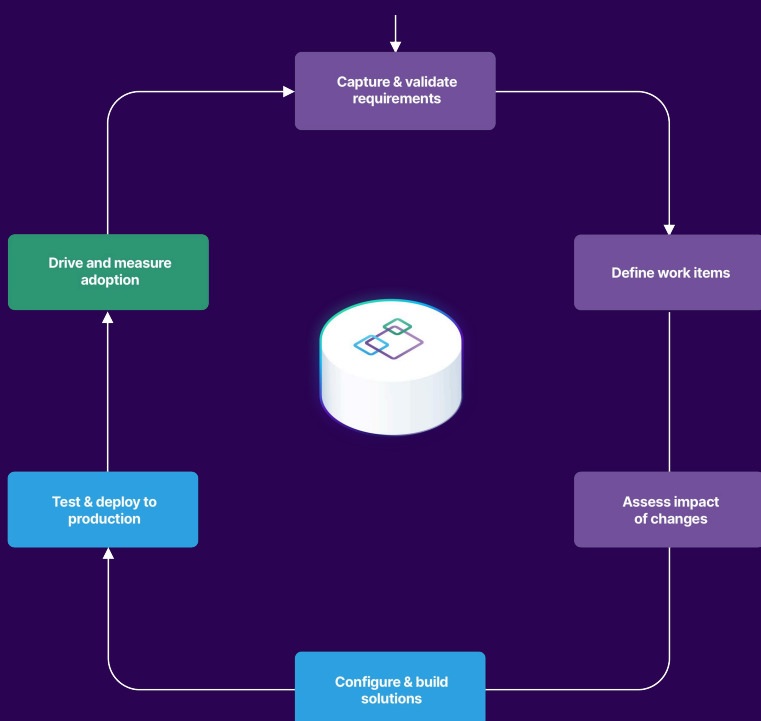
Stephy Hogan

UX Practice Leader, Red Argyle

Stephy is 2 parts designer, 2 parts developer, 3 parts perfectionist, and 1 part impatient mother. She's a founder and past VP the Presentation Guild, works on a UX team by day, has 2 YouTube channels on accessible design and science of making stuff, teaches how to design accessibly to anyone who will listen, and loves glitter. With a background as a chemist and a penchant for turning mundane tasks into engaging encounters, Stephy applies her multifaceted skills to make digital interactions delightful, underlining her commitment to making the web more accessible and enjoyable for all.

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Elements.cloud is the Change Intelligence Platform for the Salesforce ecosystem. The platform helps organizations understand their Org configuration and dependencies to help them overcome complexity and drive down technical debt. The platform supports business and architectural analysis at scale, accelerating design and analysis of new solutions and retainment of knowledge through in-context documentation. Organizations that use Elements.cloud report up to 85% reduction in org discovery time and as much as 7300% acceleration in time to complete design and analysis on new solutions.

Red Argyle does more than just implementing Salesforce solutions. Navigating Salesforce's vast functionalities and complex data landscapes can be overwhelming, even for seasoned professionals. At Red Argyle, we believe in crafting experiences that empower users and drive business success by minimizing the learning curve and maximizing productivity and efficiency through User Experience (UX) design. Our Experience Design team tackles Experience Cloud projects using a more traditional UX approach–but what's REALLY cool is that they even make brand new Salesforce implementations more usable than you can imagine through Declarative UX Design.

Introduction

Elements.cloud is the Change Intelligence platform for Salesforce. We believe in helping our customers understand and manage their Orgs better, so that the teams deliver the right business solutions faster.

Change Intelligence is the organizational ability to understand the business and system configuration of your systems and then ability to apply that intelligence to decide how best to implement change. As the market leader in the Change Intelligence category, we believe it is our duty to help educate the market and empower admins, business analysts and architects to take control of their Orgs and drive impact.

Capture & validate requirements

Drive and measure adoption

Define work items

Test & deploy to production

Assess impact of changes

Configure & build solutions

50,000+

Salesforce Org scans every month

1,317,859,139

metadata components analyzed monthly

As we run nearly 50,000 Org scans every month, and analyze over a billion (1,317,859,139 as of January 2024) metadata components every month, we are uniquely positioned to contribute to the discussions on best practices and trends in our ecosystem.

Through the '**Change Intelligence Research**'' report series, we aim to **shed light on different aspects of Org architecture** and help our community understand how their efforts rank across the ecosystem.

Talk to us

Purpose of the report

This edition of 'Change Intelligence Research' is titled "Untapped Opportunities in User Experience". Salesforce has invested a lot of time and effort into making the Lightning experience, especially through dynamic forms, a powerful tool for making amazing and effective experiences for end users. Dynamic forms allow Salesforce admins to configure pages that are contextual and reveal only the necessary information and actions at the right time, therefore unburdening the end user from having to search for information.

In that regard, Lightning pages offer a tremendous advantage over the traditional page layouts which do not support such rich customizability. We also know that in Salesforce, like in any system, the quality of the user experience has a direct impact on adoption of the platform. As robust as the architecture of the Org might be, and as effective as the automations can be, if users are dealing with overblown, confusing interfaces which require them to hunt for information and actions,
the platform will simply not be adopted to its full potential.

While both of the points above are widely known in the ecosystem, the state of Salesforce experience has never been analyzed at scale. Between Elements.cloud's employees, many of whom have managed Salesforce Orgs in the past, customer success team, and finally our consulting partners, we have heard many anecdotes about Orgs and objects which were over-customized to the point of not being usable. We have also come across Orgs which could be shown as a shining example of best practice Lightning page design. But again, nobody has actually published a study based on real data across a large population size of Salesforce customers.
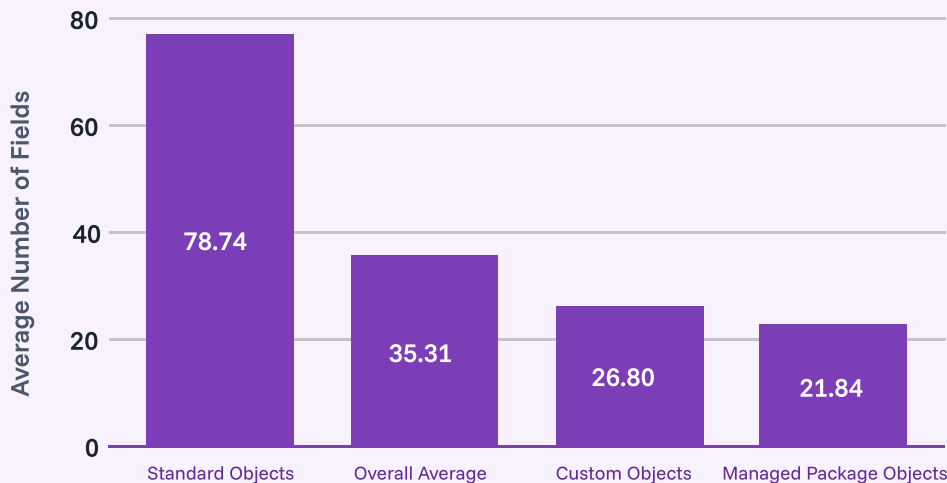
Through this report we hope to shed light on this aspect of the Salesforce Orgs.
By understanding the actual adoption and complexity of Salesforce user experience, we hope to help fuel further discussions in the ecosystem and potentially trigger more sessions at Dreamforce, TDX, Dreamin' events and other venues among Salesforce professionals about the value of good, lean user experience.
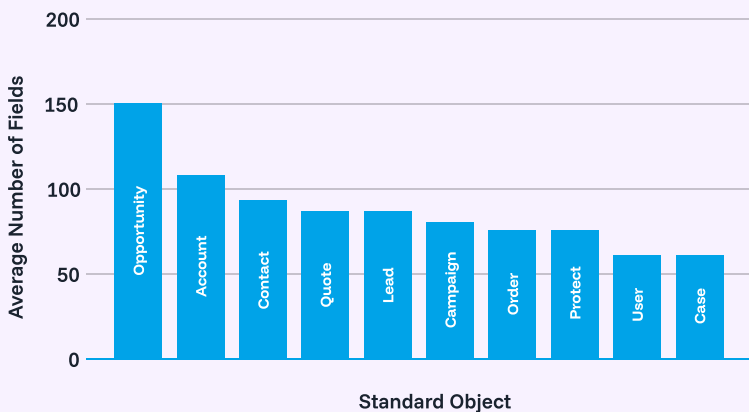
Page layout complexity

Are page layouts being overfilled with fields?

We have analyzed 21,490 page layouts. We have found out that on average there are 35.31 fields on each page layout. But further analysis has shown stark differences when page layouts were grouped by type of parent object.

Page layouts on custom and managed objects have on average 26.8 and 21.84 fields respectively. But for standard objects, that average rises up to a staggering 78.74 fields.

Average Number of Fields / Page layouts by object type

Standard Objects	78.74
Overall Average	35.31
Custom Objects	26.80
Managed Package Objects	21.84

Average Number of Fields / Standard Object: Opportunity, Account, Contact, Quote, Lead, Campaign, Order, Protect, User, Case

Which objects are most affected?

When we looked at the top 10 key standard objects, namely Opportunity, Account, Contact, Quote, Lead, Campaign, Order, Product, User and Case, we found out that the Opportunity object tends to be the most over customized. With an average of 154.24 fields per page layout, the Opportunity object tends to have over 40% more fields than page layouts on the Account object.
And nearly 100% more than the average for all standard objects.

The breakdown for the 10 key standard object reveals a worrying trend, where objects which are key to sales, marketing and customer support tend to have a very high number of fields displayed to users on the page layouts.

Key Findings

Talk to us

AVERAGE OF
35.31
fields on each page layout

AVERAGE OF
78.74
fields on page layout for standard objects

AVERAGE OF
## 154.24
fields on opportunity page layouts

LOWEST
Custom and managed
have the lowest number of fields on each layout

Distribution of page layout complexity

We also decided to understand the distribution of the page layout complexity. We plotted the number of fields per page layout and further grouped them by whether they belong to standard, custom or managed package objects.

What is immediately visible is that page layouts on standard objects tend to outpace those on both custom and managed objects significantly in terms of complexity. 24.85% of page layouts on standard objects pass the 100 field threshold, whereas only 3.89% of page layouts on custom objects do, and 3.03% on managed objects.

Distribution of Fields Per Page Layouts
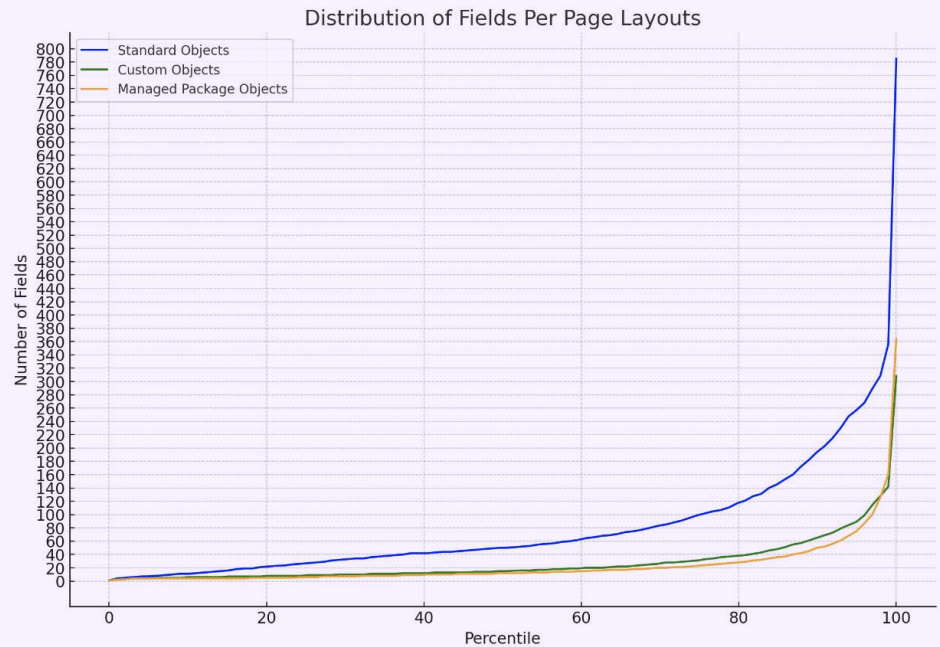
When we look at the number of fields on page layouts for different types of parent objects across 10th, 25th, 50th, 75th and 90th percentiles, we can see that standard objects outpace the other two by a factor of 3x-4x across most of the distribution.

Percentile	Number of fields on page layouts on **Standard Objects**	Number of fields on page layouts on **Custom Objects**	Number of fields on page layouts on **Managed Objects**
10th	11	6	4
25th	27	9	6
50th (Median)	50	15	12
75th	100	32	23
90th	194	65	30
Average (Mean)	78.74	26.8	21.84

#expertsreact

Stephy Hogan

UX Practice Leader, Red Argyle

REDARGYLE

> "Understanding the differences between page layouts and Lightning pages could lead to a revolution in user experience, potentially phasing out page layouts entirely for a more streamlined approach.

I would love to say that I'm shocked at the sheer number of fields found on page layouts. But honestly I'm not. And that problem could stem from a few different things.

First, the people building out the layouts are rarely, if ever, anyone who has an understanding of user experience design. They might be good humans and be empathetic towards what others are experiencing, but while they are in Salesforce adding items to page layouts, they just want to get the heck out of that task.

Since page layouts are a relic of Salesforce Classic days, they are in and of themselves, not intuitive or enjoyable to use. Admins and whomever else has control over page layouts edit to add in fields people say they need, but don't take the time to assess what could be removed. Or if they know what should and can be removed, they don't want to take the time to hunt down the obsolete fields in that old interface.

It also doesn't surprise me that custom objects have, on average, half the fields than standard objects. When you add a new, custom object, you're automatically only going to add in the fields needed for that object. They're starting with a blank slate.

Regarding page layouts in general, I think that there is a general misunderstanding about the differences between them and Lightning pages. If more people understood the differences or were even aware that they're basically 2 versions of the same thing, I can't imagine anyone would ever want to use page layouts anymore. Could Salesforce phase them out eventually and only have Lightning pages? I like to think it's possible even if it would require a minor revolution for both Salesforce customers and Salesforce themselves.

To be fair to the average user who works with either type of page structure, they just want to get the job done. And users go with what they know to get the job done. Now, if you bring a Declarative UX Designer (that wasn't a Thing until I wrote it just now), they could dramatically reduce the number of fields displayed at any one time on a page–in Lightning pages. So even if somehow 135 fields are truly needed to capture a variety of scenarios from a variety of user types, UX could determine what fields to show to which user at which times with a little sleuthing. It's called progressive disclosure and probably the number 1 best practice regarding the UX of forms (which, let's face it, is what the Salesforce UI is, nothing but a complex form).

Best Practices

What is then the ideal number of fields to ask a user to fill out at any given time? **Seven**.

We could deep dive into the relationships between cognitive overload, data quality, and user adoption, but we'll save that for another time. Let's just go over an example really quickly.

I could ask for all of these things on one screen:

Or I can ease the user into the process and only show what they need to fill out at that moment and once that initial step is acted on, THEN show more fields. Not only does this keep the user more focused, it opens up more possibilities. I show a different set of fields based on previous answers.

So we might end up with something that looks like this:
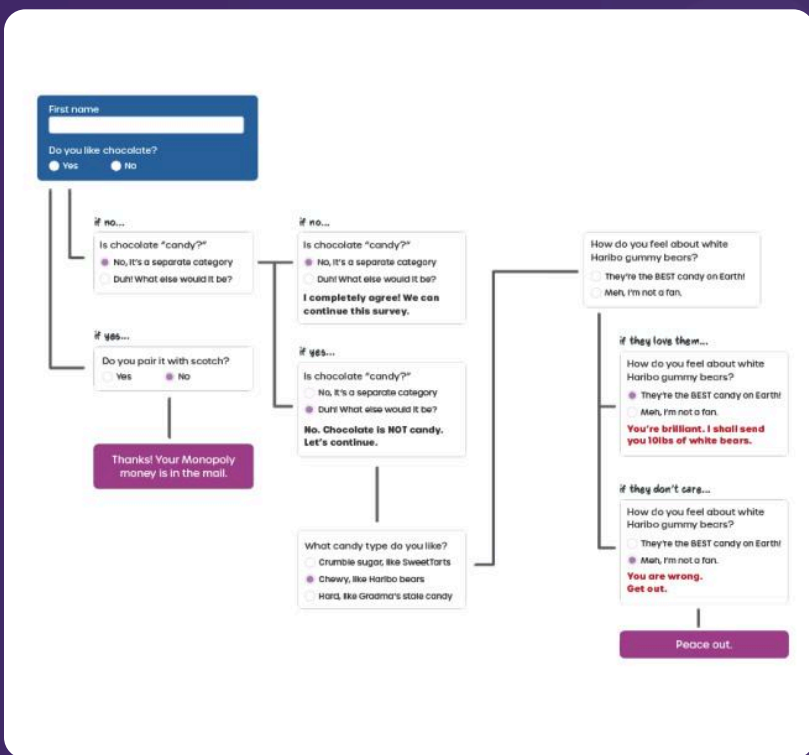
And all of that can be done on Lightning pages, not page layouts. It reduces the perceived number of fields (which is probably more important than actual number of fields), users happily fly through this seemingly simple process while maintaining or improving data quality.

So does the number of fields on a page negatively affect the experience in Salesforce?

Yes and no. If you show 135 fields to the user at once? You can bet that they'll try to submit a blank form just to see what's required and where–if you're lucky. Even then, they might put junk data in just to move forward with their day. If 135 fields exist but only the required ones for that specific user role are shown conditionally and in small chunks, then maybe not. Or like every UXer you will ever meet likes to say, "It depends."

Lightning page complexity

We have analyzed 17,145 Lightning pages. 67.77% of those were record Lightning pages, and these are the ones we decided to focus on in our analysis, as they are the type of pages most closely resembling page layouts in their application.

Of the 11,619 record Lightning pages, we looked at their dynamic forms usage and distribution by number of fields. Compared to page layout distribution, record Lightning pages in general seem to be extremely lean. Approximately 58.97% of record Lightning pages with dynamic forms, based on the number of fields being used, indicate that they might not be seriously being used. This is derived from the pages having less than 5 fields.

Distribution of Number of Fields for Standard vs Custom Objects
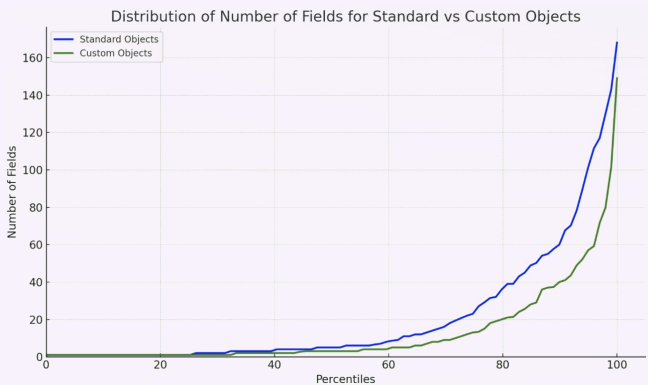
Percentile	Number of fields on page layouts on **Managed Objects**	Number of fields on page layouts on **Managed Objects**
10th	1	1
25th	1	1
50th (Median)	5	3
75th	23	13
90th	60	40.6

Key Findings

Talk to us

58.7%
Record Lightning pages have less than 5 fields.

ONLY
17.3%
Of record Lightning pages use conditional logic.

ONLY
10.2%
Of record Lightning pages use fields for filtering.

ONLY
8.9%
Of record Lightning pages use non-field filters such as picklist values, roles, record types or profiles.

However, the sheer number of fields used on Lightning pages does not tell the whole story. For one, Lightning pages allow Salesforce users to not just display data, but use fields and other metadata in conditional filtering rules. Therefore we wanted to figure out how many of the record Lightning pages actually show signs of dynamic logic.

We found out that only **17.3%** of record Lightning pages use any form of conditional logic and leverage the dynamic nature of Lightning experience. **10.2%** of all record Lightning pages use fields for filtering logic, and **8.9%** use non-field filters (picklist values, record types, roles or profiles).

Dynamic Logic in Lightning Pages

17.3%

All Filters

10.2%

Field Filters

8.9%

Non-Field Filters

Key:

Pages with Filters

Pages without Filters
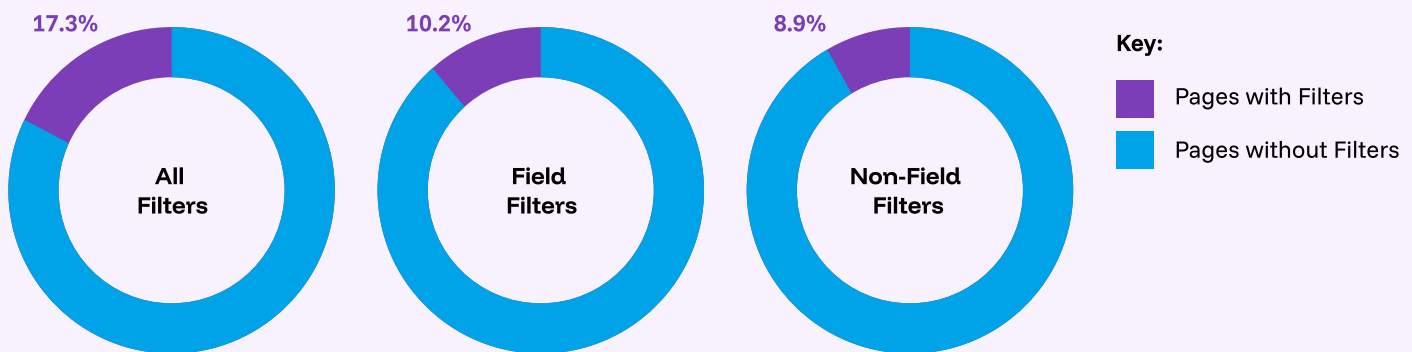
#expertsreact

Stephy Hogan

UX Practice Leader, Red Argyle

Wow, there is a severe underutilization of all of the things that make Lightning pages so incredibly powerful. Look, the Lightning page is where Salesforce has a chance to shed its stereotypes of being bulky and overwhelming.

I'm actually a little surprised that the numbers are so low when it comes to dynamic forms and conditional logic. I know others will tell me that I shouldn't be. Maybe not. So why are they so underutilized? I'm sure it's one of two reasons: lack of awareness or lack of time to train/ implement. I can imagine in older orgs, the complexity and volume of existing page layouts and custom components automatically gives the impression that simplification isn't a viable option.

Would people use Lightning pages more if they knew that they can serve up just the information specific users need and only when they need to see it? I think that if someone demonstrated how to build a proper Lightning page for a specific problem or pain point, then yes. This is where seeing a demo of what's possible by a UXer and engineering dynamic duo (even for a day) can help companies push through the perception that they either have to muddle through a messy org every day or spend millions of dollars to start over.
Because you don't have to do either of those things.

> There is a severe underutilization of all of the things that make Lightning pages so incredibly powerful.

Best Practices

Let's talk about best practices. Your new best friends should be Lightning apps, screen flows, and dynamic forms. Pairing or nesting those together along with the fact that you can make role-based Lightning pages, the sky's the limit.

You can start thinking "How do I want this to work?" instead of "What will Salesforce let me do?"

Top Tips

- Create one Lightning apps per broad role (i.e. don't go too granular, you don't have to make 1,000 Lightning apps)

- Don't overload your user by showing ALL THE THINGS.

- The top of the page should be dedicated to what a user needs to do NOW.
  Asking for information? Ask only for what's needed NOW. Does the user need to complete several actions? Which comes first? Show only that one.
  It's called progressive disclosure and your users will love you for it.

- You'll get pushback that, yes, they still need to see all of the other 595 fields.
  So chunk them up into related pieces and put each piece in a tab.
  Put the tabs under the main area we just talked about.

- Sit with the people who have to do the work and map out what they do and don't need to see.

- And then consult with someone who is a declarative wiz with the gift of empathy.

Salesforce is immensely powerful and is improving constantly. As I tell all of my design friends... it's not the tool. It's the tool behind the tool. You don't blame the hammer if you build a chair with 2 legs.

How Change Intelligence can help?

Creating intuitive, effective Salesforce user experience is something that can be mastered. Through Change Intelligence capabilities, Salesforce professionals can learn to design, build and maintain effective Salesforce experience.

1 Process and user journey mapping

Through process and user journey mapping, you can understand what information is needed at what step in the process, what actions need to be taken, and how the data is meant to flow through the systems. A detailed process diagram becomes a foundation on which you can design intentional dynamic Lightning experiences.
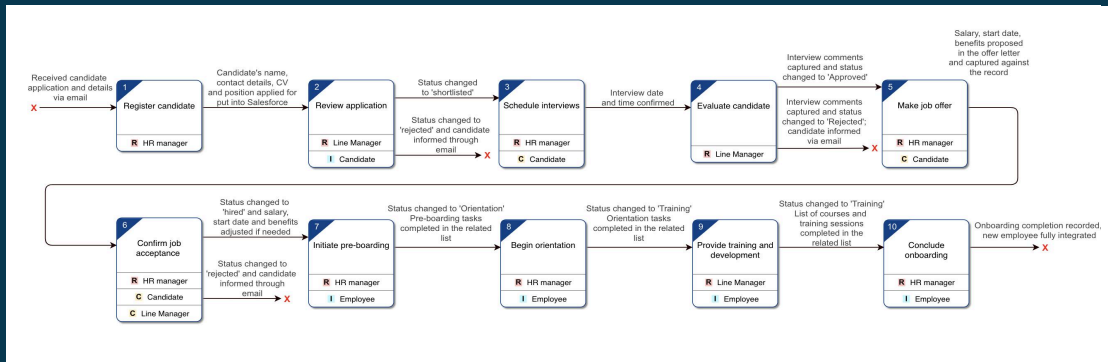
2 Automate Dependency Insights

Once you create Lightning pages, especially ones that leverage the full capability of dynamic forms, record pages can become delightful to the end users, but challenging to work with due to configuration complexity. A Change Intelligence Platform can help with automatic dependency insights on which components are used, how and where. That makes future maintenance of Lightning experience easily manageable.

3 Capture Feedback

Finally, through the contextual feedback capture mechanism, you could enhance your UAT (User Acceptance Testing) by allowing your end users to leave you feedback straight from the pages. Use that to capture their sentiment, issues and needs around their experience using the platform.

Accelerate your future with Elements, a change intelligence platform that helps you continuously innovate your business.

Book a call

Methodology

Where does the data come from?

Elements.cloud is a web application that allows Salesforce customers to connect, scan, and analyze their Org configurations. The results of our analysis are then stored in the database and used to feed insights within our application, like aggregate analytics, dependency trees, dynamic metadata grids, and others.

How did you choose the data?

The report is based on aggregating data across 100 anonymized Salesforce orgs. While we sync and analyze thousands of Orgs each day, they all vary greatly in size, scope and complexity. We chose to randomly select 100 Production Orgs that show sufficient volume and complexity. The sample of 100 Salesforce Orgs was deemed to still be statistically significant.

Among 100 randomly selected Orgs, all had a significant Salesforce user base, ranging from a few hundred users to tens of thousands. They all have at least 2 Salesforce clouds, with the majority having 3 to 4 Salesforce products implemented. They all use Lightning experience.

We were able to identify Orgs that match the required criteria using specific queries in our MongoDB and then use their Mongo record IDs to further query collections that store dependency information. The dependency collection is where we store information about relationships between individual metadata components.

The queries we run and the dataset we generated did not include any information that would allow us to identify the specific Orgs or companies. Even we don't know which companies were included in the dataset.

How did you measure User Experience in Salesforce?

User experience is a complex thing to measure. And it is also somewhat subjective. In an ideal situation, for every studied Org we would run a qualitative survey among that Org's users to rate their level of delight and frustration with their user experience. However, this is beyond our capability in terms of scale. It would also require sign-off from executive teams among all of the customers, which would be unlikely to happen in a lot of cases.

The user experience also encompasses many things, from design of the pages users interact with, naming conventions, availability of contextual help (e.g. help text on fields or in-app help through an add-on product), error handling in screen flows or other automation, and others. But that analysis would be too complex to run.

We have opted to focus on the complexity of page layouts and Lightning pages. The complexity of page layouts was defined as the number of fields on a page layout. The complexity of a Lightning page was defined as the number of filters / conditional logic elements on a Lightning page. The complexity does not mean the same thing for both metadata types. Page layouts with a lot of fields will be complex for the users to interact with. Whereas Lightning pages with a lot of conditional logic may be technically complex but result in a much more streamlined experience for the users.

Whilst the entirety of Salesforce user experience cannot be contained within this scope, the reality is that the undeniable foundation of any user's Salesforce experience is interacting with the record pages and displayed information.

Change Intelligence Research Series

Elements.cloud is the Change Intelligence platform for Salesforce.

We help organizations understand their business and systems configuration and then ability to apply that intelligence to decide how best to implement change.

As part of our commitment to the Salesforce community, we are publishing regular reports on trends in Salesforce Orgs across key areas of complexity, documentation, technical debt, adoption and overall best practices in Org Management.

Talk to us   **Learn more**