The world is Changing…

Our world is undergoing fundamental and disruptive changes at an exponential speed. Innovation, digitalization, and technological progress are fundamentally transforming whole industries, reshaping consumer demands, and challenging conventional business logics. Leaders need to face the inevitable truth: Change is ruling business environments. The speed of change is forcing organizations to shorten the cycles of transformation, while increasing the volatility of changes.

In this ever-changing business environment, a digital transformation platform such as Salesforce is the backbone and the heart of the sales, marketing and customer service teams. It simplifies their day-to-day tasks, and it helps the organization win more deals, improve customer service, and optimize marketing efforts; thereby making more profits. The success of any business is dependent on the ability of Salesforce to adapt to the speed of the new world.

An agile implementation is replete with challenges, particularly around disconnected and isolated Agile life cycle stages, manual interventions, stretched release cycles and long feedback loops.

In this hyper-agile and VUCA implementation environment, how do we achieve predictable outcomes, foresee risks, drive automation and build change agility?

Periodic project health checks can help accelerate the DevOps maturity journey. The following areas need to be addressed:

- **Continuous Integration:**
  - Build Automation
  - Configuration Management
  - Code Quality

- **Continuous Deployment**
  - Application Deployment
  - Code Promotion
  - Pipeline Management

- **Continuous Testing**
  - Functional, Performance
  - Security, Regression

- **Environment Management**
  - Provisioning
  - Service Virtualization

- **Operations**
  - Feedback from Prod
  - Quality Risk Assessment
  - Predictive Monitoring & Analytics
Building Change Agility

Agile is an approach to product delivery that helps teams respond to unpredictability through incremental, iterative work cadences. This gives organizations the ability to react quickly to the changing needs of the market. Businesses that adopt an agile framework are best equipped to deal with uncertainty and successfully adapt to, manage and control both expected and unforeseen changes. Moreover, agile businesses tend to be more innovative than businesses that do not accept agile principles.

As the beating heart of the organization, Salesforce is one of the most frequently updated and adapted applications. In addition, it touches every part of the business, which means that every change can improve or fail operations across the entire organization. Incorporating agility into the Salesforce team is critical to establishing a foundation of growth and success. The Salesforce team must be able to experiment and innovate with confidence and without fear of consequences of potential mistakes, to meet and exceed SLAs and not become a bottleneck for business growth. In Salesforce terms, managing your org in an agile way means deploying useful features frequently, on a daily or weekly basis, instead of a bulk deployment every couple of months. By doing so, the Salesforce team adds value to the business immediately and constantly.

The Challenges of Salesforce Agility

But let’s face it, agility comes with risks, and even the most skilled Salesforce professional cannot always predict in advance what will be the impact of changes, especially when the Salesforce org keeps growing in size and complexity. The interdependencies, legacy implementations, workarounds and hotfixes that have filled the org over the years, along with lack of proper documentation, make it impossible for the Salesforce team to react quickly without compromising the quality and health of their org. Hence, the main challenge of Salesforce agility is finding the right balance between speed and quality.
Taking control over the process with Panaya ForeSight

Panaya ForeSight helps Salesforce teams optimize their productivity and increase efficiency. It enables Salesforce professionals to manage an agile and dynamic environment, while maintaining a safe and secure change management process. The foundation of the solution is known as Salesforce Change Intelligence, which means utilizing metadata analysis to increase the speed of Salesforce deployments and reduce the risk of errors and bugs.

The basis of Salesforce Change Intelligence derives from the need to streamline and optimize the Salesforce release management process. It is even more critical as the Salesforce org matures and becomes more complex. The associated risks grow with each release, as well as increasing due to ongoing changes, and the ability to innovate and constantly meet business needs becomes more challenging. Many times, errors are caused by unknown dependencies or interim changes to an org’s metadata. This slows down Salesforce deliveries and creates an iterative process that leads to both frustrated Salesforce delivery managers and business owners who depend on Salesforce for their daily work.

Panaya ForeSight extracts the org’s metadata and instantly generates a visual dependencies map to help users identify in advance the impact of every change to the Salesforce org. With these insights in hand, business and IT users can respond to business and management requests (such as revising employee permissions, territories, markets, etc.) that involve changes to existing workflows or processes and implement them across the company quickly and with no risk.
While DevOps and CI/CD tools focus on providing the right automated process for change delivery, Panaya ForeSight offers a complementary solution that adds intelligence to the process. The focus of the platform is not on how to deliver the change, like traditional DevOps tools, but rather on what change to deliver. If you think of DevOps tools as well-trained muscles, then ForeSight is the brain that moves the muscles in the right direction.

ForeSight relies on a deep IA (Impact Analysis) engine along with a business-centric smart-testing solution. The IA engine learns the org’s structure and provides data-driven insights that are injected into the different phases of the development process:

Planning Phase – The most crucial data needed for the planning phase is the current structure of the org. Panaya ForeSight provides a holistic view of the org structure in the exact area of the change, allowing the team to fully understand the scope, impact and required efforts of the development.

Planning based on this comprehensive and accurate information will prevent bugs in production, provide clear predictability of the project and avoid patching fixes in later stages that would have a significant impact on the org’s technical debt and stability.

Development Phase – During the Development phase it is imperative to fully understand the scope and impact of every change. Having this data in hand allows a better resolution of issues during this phase.

For the code review and approval process, Panaya Foresight provides an extra layer of insights, by enabling users to understand the interdependencies of the change and the collateral impact on other components, as well as on external systems.

Testing Phase – One of the big challenges of the Testing phase is managing the testing efforts end-to-end (especially when the testing involves different functions in the organizations), while ensuring that the testing catalogue is optimized. Effective testing can significantly reduce testing time and resources, while increasing testing accuracy and efficiency.

The Panaya ForeSight Smart Testing solution offers an end-to-end solution for both Test Management and Test Execution. It covers a wide range of use cases from business centric UAT cycles for automated and manual testing.

The Panaya ForeSight Smart-Testing solution utilizes a Risk Based Testing approach. It leverages IA insights to enable testers to understand in advance what areas of their org are at risk and focus the testing efforts only on the areas that will be impacted by a specific change. This way the testers can be sure that they are testing the right things and not wasting time and resources on cumbersome, unnecessary tests. Moreover, the Risk Based Testing approach will pinpoint missing areas that are impacted by the change and do not have coverage of tests, thereby maintaining higher coverage on the effective areas.

Deployment Phase – The stability of every deployment is dependent on proactively identifying issues in all previous steps. In addition, this phase includes a crucial part of the success of the delivery - the business validation. If the deployment does not meet the business user's needs or expectations, it is doomed to fail, meaning it will not be adopted by the users. Panaya Foresight can notify the relevant business users when the requirement is ready for their validation, and with a click of a button it generates automatic documentation of the business user's steps in the application, allowing defect reporting with the exact steps required to reproduce any defect, as well as a straightforward handshake between the business users and the delivery team.

Panaya ForeSight can significantly optimize DevOps processes and strategies. It provides actionable insights to the CI/CD pipeline, ensuring that Admins, Developers and architects deploy changes and work through the software development lifecycle in the most effective way possible, with minimal bugs and disruption to users. As part of the Continuous Integration process, ForeSight can inject quality into the process by adding “quality gates” to the development unit and identify potential risks, such as:

- Undesired interdependencies
- Risk to critical components
- Unplanned impacts
- Impact on external systems
De-risking Deliveries with Optimized Testing Management

Fast delivery often comes at the cost of risking the quality of the end result. While understanding and assessing the impact of change during the planning stage can significantly reduce the risk, it is still imperative to apply a rigorous, yet efficient testing strategy to ensure that the business processes being developed maintain their integrity as new features and innovations are released. Salesforce testing requires a strong and precise understanding of business processes – it’s not just checking for defects in code, it should also ensure that every new development meets the need of the business.

Determining what to test to minimize breakage in production is a critical part of establishing the Salesforce testing strategy. Panaya ForeSight can help users understand in advance what areas of their org are at risk as a result of a change and identify all potential testing entry points. It provides actionable insights to developers and testers, enabling them to optimize the scope of the testing process during development. This strategy ensures that testers are not wasting time and resources on cumbersome, unnecessary tests and investigations of false positives and dead ends.

Client Speak – Proof of the pudding!

Infosys and Panaya have been jointly helping de-risk Salesforce implementations, given below are a few snippets from what the users have to say about the tool:

For a Leading Energy and Utilities major:

- In-depth analysis of existing metadata using Panaya Foresight to identify redundant components and produce a technical debt
- Analysis all the components/metadata in clients existing system to figure out the ones that are not going to be needed going forward.
- Assessing Impact of removal of the identified components on the existing system
- Assessing risk of modifying any existing component/metadata and its effects/dependencies on the existing functionality.

Leading Professional Services and Consulting Brand:

“Excellent Tool

Panaya is an excellent tool which helped me in daily activity. It helped me provide the detail impact of the fields or any element of salesforce object, validation rule or any item. It provides detailed information and impact of the field change.”

American MNC specialized in Payment Card Services

“Extremely helpful for impact assessments

This is a great tool and drastically reduces the overall time spent for impact assessments.”

Global Leader in the manufacture, design, distribution and support of premium trucks:

“Great tool for Impact Analysis!

Overall a great tool. Easy to install and authenticate. I love the Impact Analysis feature the best. This is very useful for big organization when you need to find what impact a component can do. It can dig down to all levels and help you get list of impacted components which manually would take hours to do. Chrome Extension make the tool easily accessible.”
Conclusion

Implementing Change Intelligence best practices and tools is key to building change agility and de-risking delivery. Agile and DevOps adoption that is bolstered by Panaya ForeSight takes an end-to-end view of the value chain, guided by lean principles. We help systemically make the changes through rapid iterations, enabled by intelligent automation. The advanced technology of Panaya ForeSight provides an interactive graphic visualization of the dependencies in the Salesforce org to advanced test management solutions. In short, Panaya ForeSight provides the real-time visibility and risk-based analysis needed for informed development decisions.
About the Authors

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She has an experience of 20+ years and presently heads the Salesforce center of excellence where she designs resonating industry messages, devises sales strategies, and guides the practice on how to operate in alignment to latest industry trends. She has been one of the founding members of salesforce practice at Infosys and donned multiple roles such as Program Manager, Solution Architect, Functional Architect, Advisory Board member across several salesforce implementations. Anjali is an avid speaker and her flair for communication can be testified in everything she does.

**Oz Lavee**
Oz Lavee is the CTO of Panaya Foresight and has over 20 years of experience in software development.

He is a tech Savvy who loves developing technologies and products that facilitate business processes and strategic objectives. Oz is leading the strategy and vision of the ForeSight product and bringing data driven approach and intelligence to salesforce changes.