Comprehensive Review of Salesforce Tools and Resources for AppExchange ISV Partners

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Abstract: *Salesforce AppExchange is a renowned enterprise market place and it offers a comprehensive platform to Independent Software Vendors (ISV) partners for the development, distribution, and monetization of applications. This article provides a technical literature review of key available resources that help ISVs for efficient management of a product's AppExchange life cycle. Even in the product design and development of their products up to the distribution, marketing, and selling of their products, and managing their customers' support, the ISVs are presented with solutions that optimize these functions. The importance of different Salesforce orgs, particularly the Partner Business Org (PBO), is also discussed to demonstrate their importance to ISVs. This review also focuses on how ISVs can use Salesforce's resources to improve app development and achieve better market outcomes.*

Keywords: Salesforce, AppExchange, ISV, PBO, Partner Business Org, AppExchange Partners, Product Lifecycle, Managed Packages, Salesforce Orgs, AppExchange Tools

1. Introduction

Salesforce AppExchange provides its ISV solution partners the platform to create and sell business applications to millions of users. ISVs in general organize the process from generating an idea to getting the application into the market based on some stages, such as, concept, development, marketing, sales, and customer support. Today, salesforce offers several crucial instruments and tools that assist ISV partners in managing these stages effectively. To fully unleash the power of AppExchange, ISVs should have comprehensive understanding of tools and the AppExchange ecosystem. This article discusses various tools that are available at every stage of AppExchange product life cycle but has taken a specific interest in the different types of salesforce org and the partner business org (PBO) which is normally the control center of ISV [1].

2. Salesforce AppExchange Product Lifecycle and Tools

There are six major phases in Salesforce's AppExchange product lifecycle: Plan, Build, Distribute, Market, Sell, and Support [2]. At every phase, there are specialized tools that enable ISV partners to execute all the required crucial tasks efficiently. Figure 1 shows the overview of lifecycle.
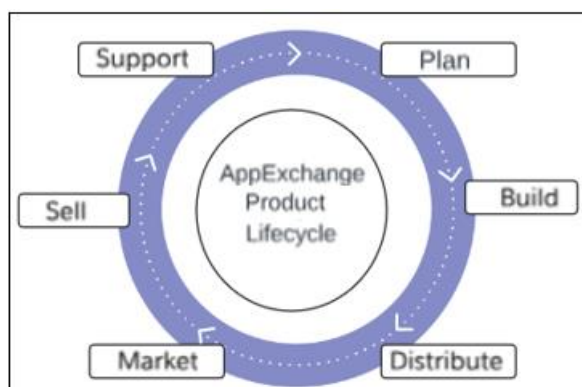

Figure 1: AppExchange Product Lifecycle

2.1 Plan Stage

Objective: In the plan stage the ISV partners explore the platform and define their business goals and then create a roadmap for solution development.

- **Trailhead**: Marketing Trailhead is a must - use tool for ISVs in the Salesforce ecosystem offering custom guidance to help ISVs develop, distribute and scale applications on the Salesforce platform. For ISVs, Trailhead provides trails and modules designed particularly to introduce ISVs with the fundamentals of managed packages, AppExchange, security reviews, and the Salesforce Partner Program. It provides hands on training and knowledge to ISVs with all that they require to create solid solutions while also including aspects of business such as the go - to - market approach and customer management. ISVs are thus not only providing valuable training for their developers; they are also assuring that their applications meet the high standards of safety, functionality, and compliance for the Salesforce environment and so increase their chances of success in the market.

- **Salesforce Partner Community**: Salesforce Partner Community is an online platform that offers ISVs, consulting partners, and resellers of Salesforce resources, tools, and assistance to thrive in the Salesforce ecosystem. It acts as a platform where the partners can work together, share information and knowledge, and review the new features of Salesforce products as well as the training materials. The Partner Community includes such basic functionalities as deal registration, program benefits, access to technical documentation, and business planning. It also aids in networking with partner groups and forums where members can exchange information and best practices. By the use of the Salesforce Partner Community, partners are in a position to effectively market their applications on AppExchange, promote partnership and cooperation opportunities, and get updates on how best to deliver value to clients while at the same time being relevant and in compliance with Salesforce's competitive and expanding ecosystem.

2.2 Build Stage

Objective: In this phase, the development and testing of the applications is done that ensure performance and security standards are being met by the application.
- **Second - Generation Managed Packaging (2GP):** Modern Managed Packaging (2GP) is a new methodology for packaging and deploying Salesforce apps and metadata that is better than the first generation of managed packaging (1GP). Targeted at simplifying app development for Independent Software Vendors (ISVs), 2GP is built to augment Salesforce DX from the ground up as a source - driven development and version control tool [3]. With 2GP customers can have the ability to import a package having same namespace, which simplifies the development process and lets each developer work on a different module. Frequent enhancement is also possible, which is handy since it can be done in versions. Furthermore, 2GP also allows to maintain CI/CD approach, which perfectly works for agile development teams. In summary, 2GP tends to simplify the packaging process, improvement of development workflows, and provide more control over the applications.

- **Environment Hub**: The Environment Hub is an object in Salesforce through which partners and developers can control several Salesforce orgs from one interface. It is particularly valuable for the ISVs, who can involve distinct environments for development, testing, and demonstration to clients [5]. By this Hub, the users have an ability to create new, view and manage Salesforce orgs – production, sandbox, and scratch orgs. It also provides for simple movement between different orgs and also gives basic information such as org edition, org status and org expiration date. Organizations use this tool to organize work on several environments at once; it is convenient because it allows working with different teams, tracking the development of the application at several stages simultaneously, and it is also essential to remember the environments' updates and their maintenance.

- **Scratch Orgs**: Scratch Orgs are automatically created, temporary, and disposable development and testing environments in Salesforce. They allow the developers to set up the Salesforce org from scratch with some predetermined schema configuration options. Scratch orgs are an element of Salesforce DX and enable source - driven development, CI/CD, and testing [4]. With scratch orgs, developers can create a new environment within minutes test some new features or bug fixes and then dispose of the org. Getting involved in many iterations, cross - functional teams, and using version control is possible with scratch orgs, which are vital for the modern Salesforce app development.

2.3 Distribute Stage

Objective: Once development is complete, the application is packaged and listed on AppExchange.
- **Partner Console**: Partner Console is a complete business management tool for Salesforce partners, more specifically ISVs and the consultants who have listed their solutions on AppExchange. By partner console, they can manage AppExchange listings including the creation and editing of listings, monitoring the performance of products, and submitting security review solutions. By partner console, the ISVs can link their listing with the packaged solutions, ensure that the products meet Salesforce security and compliance standards, and connect with packaging and development organizations.

- **AppExchange Listings**: These listings are the means by which the users interact with the Salesforce solutions such as applications, consulting services, and components. They act as a potential means for the interaction of customers for discovering, learning, and evaluating a solution. The AppExchange listing comprises of in - depth description of the features of products, screenshots, customer reviews, demo videos, and pricing. Moreover, it offers various options for starting a free trial, test drive, and direct installation of the solutions. The optimization of listings is mandatory for ISVs for enhanced visibility, engagement, and conversions. Various metrics such as AppExchange App Analytics are available that help ISVs to refine their market strategies.

2.4 Market Stage

Objective: At this stage ISVs work on generating leads for their AppExchange solutions.
- **Trialforce**: It is a powerful feature which allows ISVs for creation and delivery of the customized trial experiences of AppExchange solutions. Through trialforce, ISVs provide pre - configures salesforce orgs tailored to depict the functionality of the app, and provide hands on experience to potential customers without the installation of extensive setup. These orgs may comprise of sample data, workflows, and customizations that depict the solution's value in the real world. Trialforce assist the ISVs in streamlining the sales process by permitting prospects the exploration of apps in controlled environment thus providing self - guided trial experience.

2.5 Sell Stage

Objective: At this stage, the ISVs work on converting the leads into potential customers by managing the sales process.
- **License Management App (LMA):** LMA is a tool that is provided by Salesforce to the ISVs for management and monitoring the distribution and licensing of AppExchange products. LMA enables ISVs to track the customers who have installed their app, ISVs can also manage active licenses and can control access to various features [6]. Customer notifications, license activation, license expiration, efficient customer relationship management, and monitoring are the functionalities provided by LMA. By direct interaction with the backend of Salesforce the LMA helps to automate the licensing tasks and the maintenance of compliance with the subscription team.

- **Channel Order App (COA):** COA is a Salesforce tool that helps ISVs in managing orders of their AppExchange solutions. It simplifies the process of reporting license changes and customer subscriptions to Salesforce. With COA ISVs can manage order submissions, upgrades, and renewals while maintaining tracking of the customer entitlements. Moreover, it enables the management of customer relationships by automation of the order submission process,

as it integrates directly with the backend. It also enables to management of billing and the provision of the licenses.

2.6 Support Stage

Objective: This stage involves maintenance of solution, updates provision and customer support provision.

- **Push Upgrades**: A push upgrade means the update of managed package installed in customer Salesforce orgs by the package provider. This method makes it possible for ISVs to release new functionalities, bug fixes, and performance enhancements without forcing the end user for manual updation [7]. Push upgrades are usually employed where ISVs wish to guarantee that users have adopted the latest version of the app, with enhanced security and essential functionality updates. It is achieved through Salesforce's License Management App (LMA) which enables ISVs to identify their customers who have not upgraded and schedule for the upgrade.

- **Subscriber Console**: The subscriber console is an application intended for the Salesforce ISV partners for managing their customer subscription. That helps the understanding of customer usage and license data and ISVs are then able to monitor the installation of their solutions in real - time. Partners can also use the console for determining the overall usage of their products; view the licenses currently in use by customers as well as handle subscription updates. From the console, partners can pinpoint opportunities for upselling the products, monitor renewal cases, and ascertain whether the customers are using the current versions of the software. Especially customer relations and license management are important aspects for which ISVs need this console.

- **AppExchange App Analytics**: AppExchange App Analytics is one of the tools offered by Salesforce capable of helping ISVs to monitor their application usage by customers. By this tool, ISVs can get insights into various performance indicators including engagement, usage, and overall application performance [8]. It makes it easier to monitor the usage pattern of the customers within this environment and thus be used to look for areas in which modifications can be made to positively affect sales. The analytics data is in the form of downloadable packages usage, and summaries monthly, thus providing guidance about product development and marketing as well as customer retention strategies. This is also vital for the optimization of app offerings on the AppExchange and improving customer satisfaction.

3. The Role of Salesforce Orgs in the AppExchange Lifecycle

The Salesforce orgs are mandatory for the management of different phases of application development and interaction with customers. Salesforce provides various kinds of orgs and each one is curtailed to perform specific tasks such as development, testing, customer trials etc.

3.1 Types of Orgs

1) **Production Org**: It is the main environment where the business - critical apps and data are stored by the ISVs.

Partner Business Org (PBO) is provided by the Salesforce to ISVs as a production org.

2) **Scratch Org**: It is a temporary environment for the development and testing of applications. The ISVs can create, change, update, and dispose of the scratch orgs, which ensures that the development process is agile.

3) **Test Org**: These orgs are used to test the various features of the apps. The test orgs are created on a Professional, group or enterprise basis for replication and diversity of customer scenarios.

4) **Demo Org**: Demo orgs allow ISVs to showcase their solution to potential customers in an environment that replicates a standard Salesforce setup. Demo orgs come with extra storage and licenses to support customer demonstrations.

5) **Trial Org**: These are fully functional and configured environments where the customers can use their applications for some time, it enables the ISVs to have initial experience of their applications.

4. Importance of the Partner Business Org (PBO)

The Partner Business Org (PBO) remains the foundation of an ISV partner's functioning in the Salesforce environment. ISV partners can use it for lead tracking, license management, and numerous other aspects of their business. The PBO is pre - configured with Salesforce's partner tools and ISVs only need to develop and sell their apps and not worry about the underlying infrastructure [9, 10].

- **Centralized Management**: The tools that make up PBO include the License Management App, Channel Order App, and Subscriber Support Console which make it possible for the ISVs to deal with the customers, track orders, and provide necessary support at a single platform.

- **Development Hub**: As the core environment, the PBO hosts scratch orgs, enabling ISVs to create and manage development environments. The PBO also helps developers collaborate by allowing them to share configuration files and org shapes across teams.

- **Provisioning of Test and Trial Orgs**: By using the PBO, ISVs can create copies of test environments and trial orgs in an effort to simulate the end - user scenarios. This is important for guaranteeing efficient and optimized performance of applications in different customer environments and Salesforce editions.

5. Conclusion

Salesforce AppExchange helps ISV partners have an effective toolset that includes tools for managing the life cycle of products and services, from planning, development, distribution, sales, marketing, and customer support. The Partner Business Org (PBO) is the central point an ISVs interact with for integrating crucial tools including License Management App (LMA), Channel Order App (COA), and the Subscriber Console. These tools allow ISVs to effectively control the licensing and development of its products and customer relations together with their support processes thus reducing overhead costs. From this point, ISVs can develop high - quality applications, enhance their market positions, and increase customer satisfaction by leveraging Salesforce's

ecosystem. This kind of environment also provokes ISVs to get the most of their solutions on AppExchange and continuously innovate in Sales

References

[1] Salesforce Inc., "ISVforce Guide: Build and Distribute AppExchange Solutions," Version 51.0, Winter '21.

[2] Salesforce Inc., "Salesforce Partner Program Guide," Version 6.0.

[3] Salesforce Inc., "Second - Generation Managed Packaging Developer Guide."

[4] Salesforce Inc., "Salesforce DX Developer Guide," Version 50.0.

[5] Salesforce Inc., "Environment Hub Setup and Management Guide."

[6] Salesforce Inc., "License Management App (LMA) Documentation," Version 49.0.

[7] Salesforce Inc., "Push Upgrades and Subscriber Management Best Practices."

[8] Salesforce Inc., "AppExchange App Analytics Overview."

[9] Salesforce Inc., "Partner Business Org (PBO) Setup Guide," Version 48.0.

[10] Salesforce Inc., "AppExchange Security Review Checklist."