Enhancing the Passenger Experience through an Integrated Approach to Self-Service Opportunities

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Abstract

The aviation industry continues to rapidly adopt passenger self-service functions, but largely in a case-by-case manner, without regard to the benefits of information sharing and integration across the entire passenger journey. This White Paper provides a focus to the airport operator, airline, and key airport stakeholders in improving the passenger's journey through the entire air-travel experience. It specifically presents the requirements for, and benefits of a well-established integrated passenger self-services program (IPSSP). In discussing the passenger processing challenges, this White Paper presents a concise method for establishing an airport wide IPSSP. Emphasis is given in the later portion on the analysis of passenger services across all process areas of an airport. The readers will have a better understanding of how an airport operator and its stakeholders can improve the offering of passenger self-services, through the establishment of an IPSSP. Key benefits to an IPSSP are greatly enhancing the overall passenger experience, improving passenger flow, and providing additional commercial opportunities for the airport operator and its other customers – especially airlines and concessionaires.

Background

Self-service opportunities today permeate all areas of a passenger's air-travel journey. These opportunities begin prior to arriving at the airport and continue through the airport departure process, in-flight services, airport transfer points, and ultimately through the airport departure process. Figure 1 presents the many journey steps at which self-service opportunities may be offered.

Figure 1: Passenger Journey Points

Considering the many steps of this journey, the airline, airport operator, ground handler, regulatory agency, and others have an ever-growing list of devices, technologies, and applications through which they could choose to provide self-service opportunities. For example, the options for passenger devices that once included just a kiosk now include smart phones and tablets, interactive signage, and a host of wearable technologies. Expanding at an even faster pace are the technologies and systems available to these devices, including websites and mobile apps, social media sites, Wi-Fi, Bluetooth, Near Field Communications, and others; each leap-frogging the other in service and performance.

Through the shared use of these technologies services that have been traditionally dedicated to either airline or airport operator are now being shared in various capacities. Take for example, inflight services providing passengers on-board duty free shopping. Hong Kong-based international airline, Dragonair allows the passenger to purchase products on-board and order them for home delivery service, which can be collected at a designated 7-Eleven store at Hong Kong International Airport.

As a result of these shared services, an increasing area of importance for airport operators, is ensuring wireless connectivity is available in and around the ramp areas. Many of the airlines are installing wireless connectivity throughout their aircraft fleet, for example United Airlines upgrading their entire International fleet. For the airline, once connectivity is installed in the aircraft, it can then offer better services. Such services (whether maintenance related or retail) require download capabilities upon arrival and departure. Airport wireless infrastructure enables this download capability for the airline.

Although reasons for providing self-services may vary among airport locations and service providers, the following are significant service factors that most directly impact passengers.

- **Enhancing the Experience** – Identifying affordable leisure, dining, and experiential offerings, while making the journey through the airport an enjoyable experience.
- **Personalization** – Tailoring service delivery, communications, and incentives according to passenger needs, loyalty, travel destinations, and past behaviors.
- **Customer Insight** – Revealing travel and commercial preferences, thus providing greater opportunities for these preferences.
- **Commercial Proposition** – Determining the balance between luxury, discount, pop-up, and novelty that will prove most popular.
- **The Journey** – Streamlining the core passenger processes.

The Prepared Passenger

Even though the introduction of passenger self-services has provided new and innovative benefits for the aviation industry, the sequential nature of the passenger process has basically remained unchanged since the 1990s. This sequential nature can be seen in Figure 2 showing the 14-step journey established by the International Air Travel Association (IATA). For some time now, IATA has led the way with airlines, helping to deploy electronic services within each of the defined process steps.[1]

Departure

01 Pre-travel	02 Ticket Issuance	03 Check-in	04 Document Scanning	05 Authorisation to proceed	06 Baggage processing	07 Immigration exit control

Flight   **Arrival**

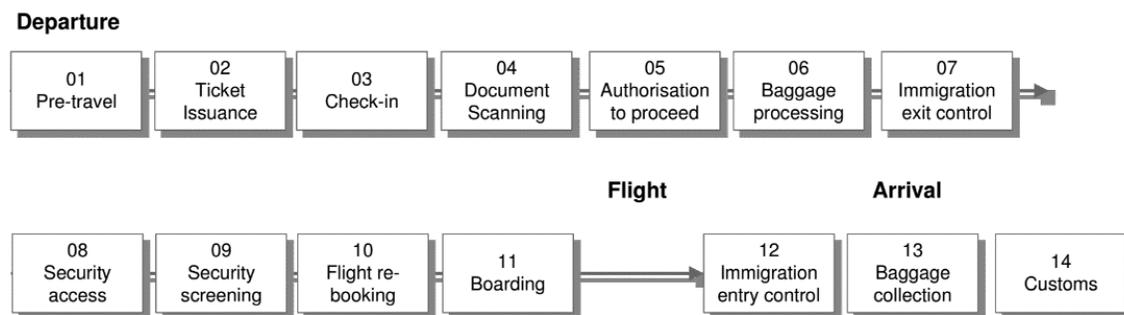| 08 Security access	09 Security screening	10 Flight re-booking	11 Boarding	12 Immigration entry control	13 Baggage collection	14 Customs

Figure 2: IATA 14 Passenger Journey Steps

However, with the fast adoption rate of mobile technologies, the barriers of the sequential passenger journey steps are breaking down. Many of the functions typically accomplished in each of the process steps can now be performed at various times of the passenger's journey, and in various means of off-airport and on-airport locations. Compared to the traditional check-in process, today, passengers can

check-in to their next flight virtually anywhere, using their mobile phone. In fact, several airlines are re-thinking the entire check-in process, including the elimination of the 24-hour check-in window.

The trend of maturing innovative technologies is also helping to break down this sequential process. One such example is the opportunity to increase in-flight passenger self-service offerings. Emirates, for example, has a limited form of in-flight spa services on some of its A380's. The airline could allow passengers to make their own spa reservation using the Emirates website and the mobile app while in flight or at any other pre-travel step.

Also prevalent today is that passenger self-services are mostly characterized by the passenger's ability to self-customize and personalize the travel journey steps and, consequently, the journey itself. In effect, passengers are pre-setting how they expect to progress through the air-travel journey. This personalization of the passenger's travel was also noted in the *2015 Airline IT Trends Survey* produced by SITA[2], where it was stated:

> *"In particular, personalization of the journey has been given a kick start by the strong adoption of smartphones, which allows anytime, anywhere interaction with passengers. Over 75% of airlines plan major programs to deliver passenger services through smartphones in the next three years."*

This trend to personalize the journey is equally seen throughout airports. For example, when a passenger chooses to download the boarding pass onto a mobile phone, the passenger then expects to use the "mobile boarding pass" at all required airport check points. This expectation is regardless of whether the checkpoint is managed by the airport operator, airline, or security agency.

Also helping to drive this shift to a more personalized journey has been the influx of third parties (such as Google, mobile device app developers, flight data providers, etc.) into the air travel industry. In the past, these third parties have not traditionally played a direct role in the area of passenger services. Today, however, due to the advancements of mobile technologies, they are providing a growing set of services. Along with the third party influx, airlines are also attempting to reach their passengers while they are still in the airport facility. One such example is noted in the *2015 SITA Airline Survey*,

> *"Also in its infancy is a 'virtual concierge' for passengers delivering airport shopping to gates and lounges. Around one in five airlines plans to introduce such a service over the next three years."*

The Unprepared Airport

Considering the myriad of self-service opportunities entering into the airport environment; either by the airport operator, airline, third parties, or other stakeholders, it is becoming increasingly clear that the airport operator must take an integrated approach to managing the success of these passenger services. This point is made clear by a recent statement regarding the deployment of beacons, noted in a SITA Labs Report titled, "*Beacon Technology – Improving the Customer Service Experience*".[3]

> *"Our initial research indicates that deploying only a handful of beacons around an airport will not impact existing Wi-Fi signals. However, there is a clear relationship between the number of beacon deployments (density), the power setting (which controls the range) and the advertising interval (frequency of emission). Too many beacons deployed at the wrong settings will disrupt each other's signals, and existing Wi-Fi infrastructure. The evidence is that airports will need to have clear visibility of where beacons are being deployed and how…. The fact that airports are shared environments with many different businesses using the facilities raises a number of questions with*

beacons. Not least is who is responsible for deploying the beacons - airport, airline, ground handler, retail operators? If an airport deploys a set of beacons how can the airline make use of them?"

Summarizing this point, the airport operator must not only manage the deployment of self-services from an integrated approach, but also with the understanding of managing the airport as a "common environment". Environment, being a general term referring to the facility, IT systems, policies and procedures, and all elements needed in managing the cohesive asset known as the airport.

Even with this understanding, the airport operator typically still manages the deployment of these technologies in an independent or non-integrated fashion. For example, an airport operator may choose to install a self-service program for pre-paid or premium parking services without much concern for passenger benefits further down the passenger's journey, such as offering a fast-lane access at security. Also, the airport operator does not typically capture and thus is unable to share even such basic information that the passenger has arrived at the airport with relevant stakeholders.

For these reasons, many in the aviation industry are stepping back to review all processes and respective roles in a growing effort towards optimizing passenger self-service opportunities. Airport operators that do not recognize this need to re-evaluate all processes and roles and instead continue to approach passenger self-services from a non-integrated perspective stand to risk losing the growing passenger base that seek to personalize their journey and other benefits of this collaborative approach. These airport operators also risk losing operational efficiencies within the airport environment as airlines and other stakeholders will continue to deploy new and innovative passenger self-services on their own.

An Integrated Perspective

Recently, the Airport Cooperative Research Program (ACRP) released Report 136, "*Guidebook on Implementing Integrated Self-Services at Airports*". This guidebook takes the vantage point of the integrated airport environment as discussed above, and was a key reference point for this paper.[4] Concurrently, the ACI World ACRIS (Airport Community Recommended Information Services) subcommittee has initiated a new working group, called "Seamless Travel", whose objectives include making the travel process smoother and more transparent between airports.

Driven by technology trends and passengers' expectations for greater self-determination within their travel journey, these organizations are considering a far more simplified view of the passenger journey. Rather than analyzing every one of the 14 IATA steps in the travel model (check-in, bag-drop, security check, boarding, etc.) and associating a certain transaction (such as check-in) to a specific location (such as the ticketing lobby), they are instead focusing on fewer process areas and on more ways for passengers to freely choose when and where they will execute those transactions. For example, passengers may be in the airside process area of the airport as either departing, arriving, or transferring and, therefore, will have unique expectations regardless of this location. Or passengers may choose to check-in with their mobile phone while in a limousine to the airport and by-pass the traditional ticket lobby altogether.

Although the definition of process areas might differ by airport, a typical break down includes:

- Pre-Arrival
- Landside
- Security
- Airside
- Boarding
- In Flight

Across all process area, the airport operation must understand that all stakeholders, especially the airlines, may have a significant role in providing passenger self-services. The airport-airline relationship is becoming increasingly interwoven and complex, as both entities share responsibility for more processes and data, and seek to collaboratively improve efficiency and service levels. In addition, they must both respond to a wide range of regulatory and security requirements. For example, Schiphol and KLM have open communication and regular meetings regarding how to collaboratively address topics relating to social media, security queue times, and passenger experience. The overall passenger process is no longer just the responsibility of one or the other.

Regardless of the change in passenger function, the airport operator must manage the facility as a common environment. By doing so, the airport operator can facilitate the services of the passenger and the experience as he or she travels through the various process areas of the airport regardless of which stakeholder (airline, airport, concession, contractor, etc.) has the most recent interaction with the passenger. It is through this means that the airport operator works with its airlines and other tenants, managing and accommodating the variations within each operating model. Intelligent, effective planning across such a "common environment" calls for an integrated approach.

An integrated approach to passenger self-services is best facilitated by the airport operator who formalizes its self-service program delivery organization to focus on reviewing and planning for self-services across all aspects of the airport. Although airport operators may have the basic management structure in place for addressing passenger services, they may not have the formalized emphasis towards passenger self-services. Every airport operator has a unique perspective through which its Integrated Passenger Self-Service Program (IPSSP) should be designed. These perspectives are shaped by aspects such as management vision and expectations, business drivers, airline operating models, passenger profiles, and industry involvement. With regard to passenger self-services, three airport business functions typically take a lead role in the planning and execution. These are:

- **Operations** – focuses on the efficiency, safety, and flow-through of the passenger
- **Planning** – focuses on the satisfaction of the passenger as they move through the Airport
- **Information Technology** – provides the communications infrastructure and IT solutions for meeting the passenger's needs.

Additionally, the impact and contributions of innovation cannot be underestimated. Some airports, such as Genève Aéroport, are ensuring innovation across the organizational structure by forming an IT Airport Innovation group. This group works in coordination with Operations and a Passenger Self-Service Steering Committee to contribute to the planning and further elaboration of self-service projects.

The organizational and operational structure of such an integrated self-service program (IPSSP) is of utmost importance. ACRP Report 136 goes into considerable detail regarding planning and establishing this structure. Summarized below are the key points of consideration.[4]

1. **Understand Airport Perspective**
Every Airport Operator has a unique perspective through which its IPSSP should be designed. These perspectives are shaped by things such as management expectations, business drivers, airline operating models, passenger profiles, and industry involvement. Defining the perspective for a specific Airport will lay the foundation for making a valid case to obtain the required level of management support. The use of an IPSSP working group, consisting of airport, airline, and other stakeholders is a good practice to help establish initial business drivers.

2. **Obtain Management Support**
Support from Executive Management is essential for the long-term success of an IPSSP. Operations, Planning, and Information Technology all play a fundamental role in the planning and

implementation of IPSSP initiatives and all must have active executive support from the beginning for the airport-wide process changes to be accepted [1].

To obtain the initial support of Executive Management and to establish a means of keeping that support throughout the IPSSP, consideration should be given to:

- Align the Vision of the IPSSP with the Business Vision
- Build Awareness for Change
- Be Ready to Discuss Strategies for Awareness in Process Change
- Prepare to Discuss Roles and Responsibilities
- Present Clear Next Steps
- Establish Trust by Effective Follow Through

3. Develop IPSSP Delivery Organization/Steering Committee

A formal organization is needed to plan and govern an IPSSP. This organization serves as the hub for stakeholder engagement and performs and/or oversees the planning, implementation, and review for Passenger Self-Services airport-wide to ensure a consistent approach toward achieving IPSSP objectives that are fully aligned with Executive Management business objectives. After obtaining Executive Management support, the IPSSP Steering Committee should quickly establish criteria for performance measurement and evaluation factors.

As a part of the IPSSP organization structure, the airport operator should consider establishment of a formal position or function, dedicated to *IT Innovations*. Innovation representation is needed to maintain a consistent view on the ever-changing environment for Passenger Self-Services. Such a focus on innovation should consider technologies, Aviation committees and standards, and social media.

4. Define Performance Measurement

Without a means to measure performance, IPSSP initiatives and the Program as a whole may function effectively for years without ever producing the required outcomes necessary to achieve their objectives. In order to judge success or failure and make necessary adjustments, key performance indicators (KPIs) must be developed, monitored, and reported.

In establishing KPIs, it is important to engage the airline and key tenant stakeholders. For example, for KLM Airlines, metrics are highly valued for the purpose of understanding the passenger and for evaluating initiatives meant to improve engagement, service, and customer experience. Customer panels, usability testing, on the spot customer interviews, and website click behavior analyses are all methods used to understand customers and to determine success of a new initiative to improve passenger service and experience.

5. Evaluate Factors for Consideration

Several key factors play a pivotal role in the design of Passenger Self-Service initiatives that, if not adequately considered, can result in failure. Stakeholder consensus, Regulatory and legal issues, access to passenger and flight data, and privacy concerns are a few. It is also imperative to evaluate the likelihood of achieving the expected benefits and of experiencing risks. As with any worth-while effort, expect differing opinions, which if handled constructively, can be of great value. For example, WestJet Airlines believes that partnerships with airports are critical in the success of self-service products. Airport leadership needs to work closely with their airline tenants to understand each tenant's self-service philosophy and desires. These may not always align between tenants or between tenants and the airport operator. Dialogue, debate, and compromise will be required to settle on a direction that best suits the needs of everyone.

6. Address Fundamental Impacts

There are a number of fundamental impacts within the airport environment that must be understood and addressed to support a successful IPSSP implementation. These include the management of data, provision for connectivity, use of enabling technologies, changes to the facility, human resources, and communications with passengers. A proactive approach to addressing these items from a high-level Strategy will greatly increase the probability of success.

One example is in the evaluation of IT infrastructure for support of location awareness based services, provided through short range wireless technologies such as RFID or Bluetooth. At Orlando International Airport, they have installed 1,000 Beacons throughout the terminal, in support of their mobile app's Location aware mapping function. Through use of the Beacons, you-are-here directional maps are presented to the mobile app user, providing directional information and key shopping locations along the way. To ensure an effective use across its entire infrastructure, the airport operator has taken on the responsibility for the installation and management of shared use of these technologies.

7. Implement Initiatives

A well-conceived and thoroughly justified IPSSP can quickly lose support as a result of a single poorly implemented initiative. After the significant investment of resource time in strategy development and program planning, project implementation is not the time to start cutting corners. Each project must adhere to a structured implementation process that applies the appropriate depth of planning for the size and scope of the project.

8. Monitor & Report

Monitoring and reporting the defined performance criteria for each and every initiative is necessary to ensure that either adjustments can be made that further the progress toward achieving the stated Objectives, or that initiatives can be halted before further resources are wasted. This is a critical component of the quality management process.

9. Assess Next Steps

As Passenger Self-Service projects are closed out and transitioned to steady-state operations, the focus cycles back to the planning Stage where data is analyzed, Objectives are tweaked, KPIs are adjusted, and corrective actions are taken. Each and every component of the IPSSP will continually mature as fundamental impacts change, new factors for consideration emerge, and perspectives change.

IPSS Planning through Careful Business Analysis

Concurrent with Steering Committee planning, Focus Team members should begin defining the end-to-end passenger journeys. This effort must consider Passenger Self-Service impacts and benefits across all process areas relative to the stakeholders needs.

The prior example of an airport operator offering the purchase of prepaid discount parking via its website provides a meaningful example of how a broader, integrated self-service approach in place of the initial narrow-scoped, stand-alone solution can provide significant benefits to the passenger, his/her travel experience, and the airport as a whole. Once the organization starts asking how its entire community of stakeholders – airport, airlines, concessions, contractors, and so forth – could benefit from this customer interaction it will begin to realize a progression of benefits, the sum of which are greater than the whole. These extended benefits are difficult to achieve if they are not a part of the initial scope for the project, as will become evident by evaluating these two examples below.

Figure 3 presents the initial "As-Is" use case flowchart of a probable process. It should be noted that the process is restricted to the passenger flow in the Pre-Arrival process area. The accompanying notes provide descriptive details for various steps of the process.
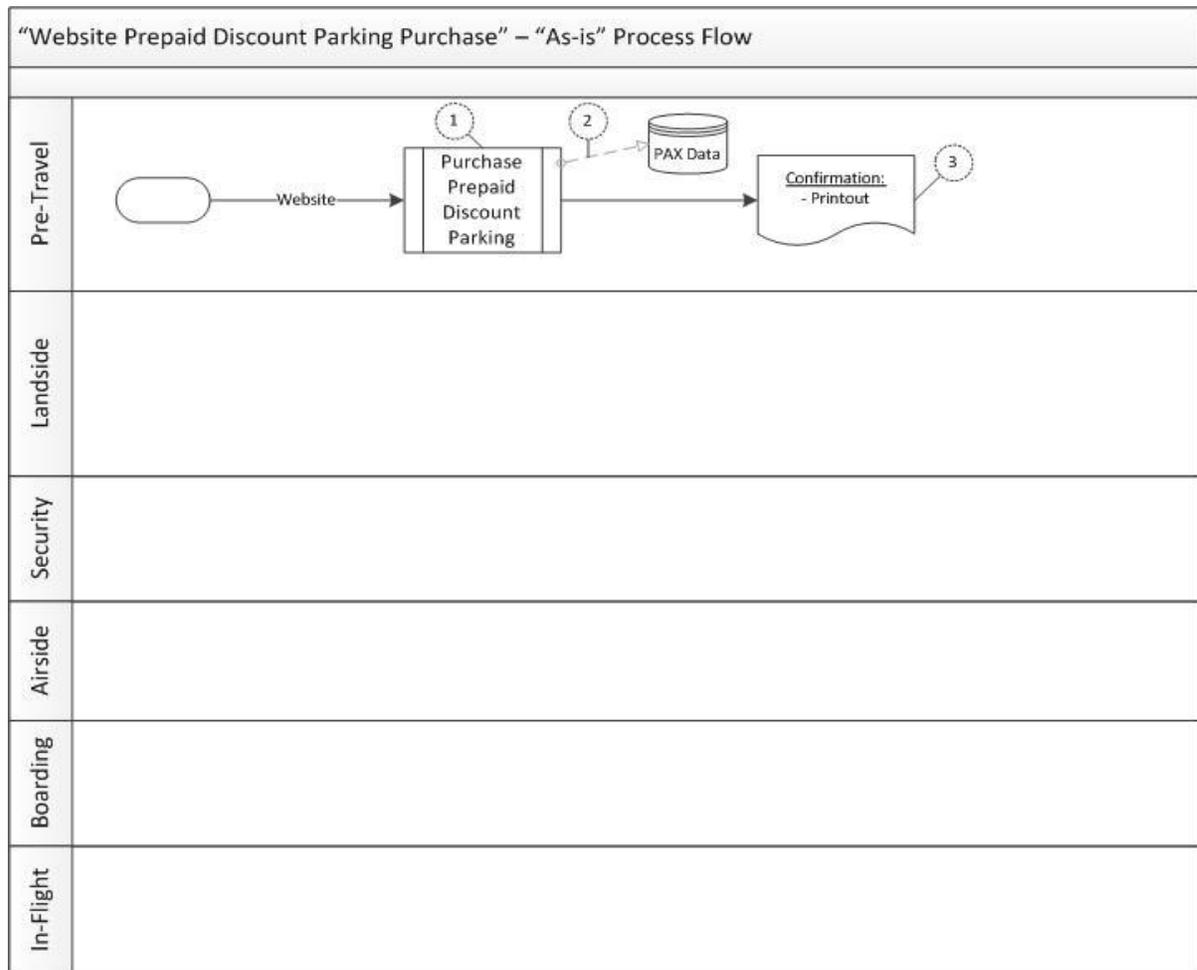

Figure 3: As-Is Passenger Process Flow

NOTES*:*

① The passenger visits the airport's website and follows the clickable banner for prepaid discount parking. After selecting the desired check-in and check-out dates, the system displays available parking options and fees. Choosing a parking option, the passenger then provides contact and payment information. The passenger can optionally sign up to become a registered user and experience the benefits of speedier future use of the service.

② Data retained by the system includes: check-in date; check-out date; parking terminal; first name, last name, phone, email and billing address. Payment information is used to process the transaction but is not stored subject to PCI security standards.

③ The process results in a confirmation email which must be printed and presented to the parking attendant at the facility exit together with the parking ticket, which the passenger received when entering the parking facility.

The major benefit received through this process is the collection of passenger data. In this instance, the airport is especially interested in zip codes, which can be used for a more targeted advertising campaigns for this and other planned parking initiatives.

This single-purpose project could be praised as a great success for the parking office. And although it does provide some benefit, the process lacks an integrated approach that encompasses the complete passenger self-service journey. Due to its limited design, it does not consider any impact or benefit to the other five process areas of the airport. This translates into missed opportunities that the broader perspective of the IPSSP processes would be more likely to deliver.

For example, consider the next scenario, which takes a more integrated approach to this project. Figure 4 presents a fully integrated "To-Be" scenario: Purchase of a *Travel Token*. This complete end-to-end seamless passenger journey incorporates the existing prepaid discount parking option, but adds substantial detail and possibilities to integrate it across all airport process areas, with a focus on process areas that the airport operator controls.

In addition, as seen in the accompanying notes, this scenario emphasizes data sharing and other coordination efforts with various airport stakeholders that are best incorporated into the project from its inception and design stages through the IPSSP process. This is crucial in order to make this process more efficient. In turn, if all stakeholders work together, every entity involved will benefit from such an integrated approach. This approach also considers, as described in the notes, biometric-based processing at various journey points.
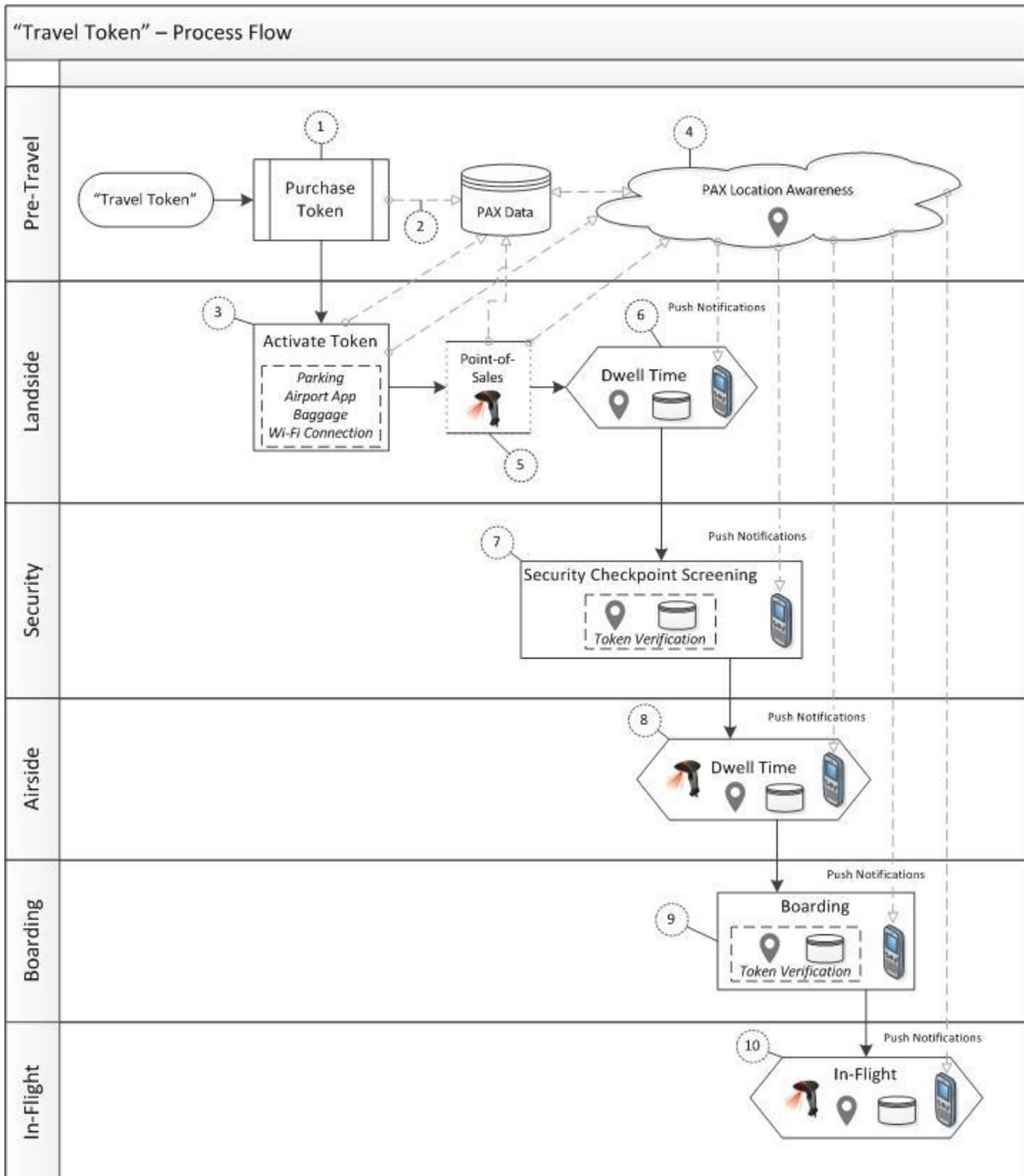
Figure 4: To-Be Passenger Process Flow

NOTES:

Pre-Travel: Process steps take place wherever the passenger purchases the Travel Token (1) and includes the data collection processes.

① The Travel Token would be purchased on the airport's website or a mobile application in a similar fashion as the previous Prepaid Discount Parking example. Unlike the previous example, the Travel Token would require a one-time registration to sign up for the program. The user would receive a Travel Token that would be a scan-able code (QR, barcode) or use NFC or other near-field detection technologies. Future implementations of the Travel Token could be coupled with

the passenger's boarding pass and trip-specific itinerary for more enhanced interaction opportunities. The sign-up process could provide <u>Pre-Travel</u> reservations for additional services, such as:

- Parking services
  - Discounted prepaid parking
  - Parking reservations (i.e. electric vehicle, general blocked-off reserved section)
  - Premier parking (close to the Terminal)
  - Valet parking
- Transportation services (i.e., taxis, shuttles, limousines) provided by Airport-sponsored Ground Transportation companies.
- Wheelchair service (parking garage, curb-side, valet)
- Baggage pick-up & delivery services (home, parking garage, hotel)

Example <u>Landside</u> services that could be integrated in the sign-up process include:

- Food/drink reservations for specific airport concessionaires
- Prompts to download an Airport app
  - A well-developed <u>airport app</u> would be a very suitable solution to make this process highly beneficial. This app could become the Travel Token passenger's "travel companion" and "go-to" resource for the travel experience at the relevant Airport.
- Home-printed bag tags or permanent e-tags for the purpose of self-tagging and unassisted bag drop
- Wi-Fi Access
  - If Wi-Fi is fee-based, the Travel Token would grant access to free (no-ad) high-speed connection throughout the entire airport.

<u>Security</u> services integration could also be possible during the sign-up process:

- 3rd party handshake integration with TSA Pre✓, CLEAR, Global Entry, or airline – specific Frequent Flyer programs.

② The Travel Token would require only a small number of data elements, but should include additional information to create a solid passenger profile before arrival at the airport. Passenger data including trip specific details as well as personal preferences and interests would allow stakeholders multiple opportunities to offer retail discounts and services. Allowing passengers the option to sign up with a social media profile (i.e. Facebook, Twitter) may provide some preference information without specifically asking for requested data.

- <u>Required data</u>: Last name, first name, address, mobile phone, email, and basic flight information
- <u>Optional data</u>:
  - Flight Confirmation Number
  - Travel profile [size of party (one vs. family), type of travel (business vs. leisure), etc.]
  - Known Traveler Number, CLEAR Number, Global Entry Number, Frequent Flyer Number(s), Government-sponsored ID(s), e-tag number(s)
  - Personal preferences (food, drink, hobbies, interests, etc.)
  - Preferred retailer(s) (located at the airport)

<u>Landside</u>: Process steps take place on airport property, including parking facilities and terminals. If an airport opts for using biometrics during this process, biometric enrollment would take place here. This could be accomplished using a kiosk that takes a fingerprint or facial image, for example, and links it to official IDs and travel documents, such as the Travel Token and/or boarding pass. Once validated, biometrics can be deployed at other areas for various purposes.

③ The Travel Token could be activated in different ways, including entry to parking garage/facility, via pay-on-foot kiosks, remote baggage check-in, curb-side baggage check-in, detection of mobile device that has airport app installed, and/or connecting to airport Wi-Fi. This lets the airport know this specific passenger is here. The Airport app and other integrated airport systems are now "ready" to provide the customer experience. Meetings with Airport Division staff would be relevant to address needs and discover opportunities for this step.

④ The airport would provide location-based services by utilizing passenger location/tracking sensors (e.g., NFC or beacons). Activating the Travel Token at step 3 will trigger location awareness, and will allow for sending tailored (based on profile data and preferences previously collected) push notifications to Travel Token passengers located in all process areas. These notifications (considering the nature of and the service offerings in the specific process areas) could include among others:

- Travel related: flight status updates, gate info, security line wait times
- Discounts / Coupons for food, drink, retail, entertainment, etc.
- Status updates for food/drink reservations made during Travel Token registration
- Wayfinding / Directions (using text or indoor mapping functionalities) to:
  o Pay-phones, paging stations, information desks
  o Security checkpoints, gates
  o Concessionaires
- Emergency / First Aid information

⑤ Before reaching security, the passenger now is being welcomed to the airport via the airport app push notifications. Tailored offerings can be sent to the passenger to improve the experience as well as to generate revenue for the airport and its stakeholders. Collecting Point-of-Sale (PoS) data is presented as its own step to show its relevance. These functions require collaboration and data sharing between the airport and the concessionaires. Integrated with passenger location awareness it provides mutual benefits. PoS takes place first in landside, but also during the airside and in-flight areas.

⑥ Travel related information and updates, reservation reminders, and wayfinding assistance are provided to make sure the passenger is fully informed about his/her trip. Knowing, for example, how long the security wait time is and then being reminded to make one's way to the security because the flight departure is approaching, will alleviate anxiety and improve time management for the passenger. Other information listed in note 3 are applicable here.

> Security: This is more of a checkpoint /gateway than an area. Nevertheless, communication/interaction and process improvements here are more important to the passenger than at any other point of the journey.

⑦ Having purchased the Travel Token and provided additional information, the passenger can now avoid the regular security lines and proceed to one of a few fast lane options. Based on the travel profile data provided during sign-up, a passenger can take his family of 6, for example, through the "family" fast lane. Other Travel Token owners would have the privilege to use the 1st Class lane. The frequent business traveler, who opted to integrate his Travel Token with his TSA Pre✓ or CLEAR membership, enters their designated security lane. The goal here is, of course, to get passengers as quickly and as stress-free as possible through security and into the airside area, where additional revenue-generating options exist. Push notification can continue to provide flight updates, or to remind the passenger, for example, of the food reservation that was made during Travel Token purchase/sign-up.

⑧ Similar to landside, this airport process area is generally considered dwell time before boarding the aircraft. During this dwell time, the airport app will interact with the passengers and provide services and notifications based on the required and optional information provided during Travel Token purchase. More PoS data can be collected and shared with stakeholders, which can, if allowed by the token subscriber, translate into tailored push notification as the passenger transitions through airside and boarding and onto the flight.

⑨ For Travel Token owners the boarding process could be automated by scanning the Travel Token through self-boarding gates (assumes integration with the boarding pass). Biometric validation can be included here as well. If self-boarding gates are not an option, Travel Token owners will benefit from boarding right after 1st and business class, but prior to passengers without a Travel Token. Push notifications could include specifics about the flight or offers such meal/beverage vouchers or Wi-Fi discounts to be used during in-flight.

Inflight: Traditionally, airlines provide Inflight services such as on-line duty free shopping, without the involvement of the airport operator. With the adoption of an IPSSP the airport operator and concession stakeholders can now participate in many of these services. Close coordination between airport operator, airline, and retail provider can produce new lines of revenue for all involved.

⑩ Available through inf-light network services, the airport app can continue to provide value by offering, for example, hotel vouchers for the destination city, onward transportation arrangements (by train, bus, or rental car, updated flight information for connecting flights, baggage notifications (e.g., bag carousel belt, e-tag receipts, or tracking if baggage delivery services where opted for during Travel Token sign-up. Passengers can also purchase products during the flight and order them for self pick-up services at the arriving International Airport.

Conclusion

The above process can be an effective tool for the planning, installing and maintaining an Integrated Passenger Self Service Program. Through this process, the airport operator can better meet the needs of the passenger, and respond to changes and innovations, while still managing the facility from a common environment. However, for this process to be successful, it requires a clear understanding of the business objectives, full support from executive management, and a well-established governance program to manage change and innovation.

References

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