

Whether you are new to the airline payments industry or a seasoned expert, this guide hits just the right levels of detail and insight.

In one book you have everything about the intricate, complex and fast changing world of airline payments at your fingertips. It offers a comprehensive road map not only for the payment team but their colleagues in finance, e-commerce, ancillary revenue, IT and marketing.

Investing your time in reading this guide and keeping it handy as a reference will not only make for a better experience for your customers, but also keep your CFO happy as you not only add revenue but save costs too."

#### Michael Smith

Chairman,
Airline and Travel Payment Summit &
Managing Partner, Ai Group Inc

# Airline Payments Handbook

2<sup>nd</sup> Edition

A complete guide to payments in the air transport industry

**Thomas Helldorff** 

Payments.aero



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# **Preface**

There's a story told about the billionaire yacht owner who has consulted everyone, without success, on how to fix the engine on his yacht.

Finally, he finds the one person who can fix anything and he invites her to come and fix the engine. After checking it over, she asks the owner to try and start the engine. She listens intently and gets out a tiny hammer.

Then she carefully and gently hits part of the engine and immediately the engine springs into life. The delighted owner asks for her bill and she writes it out for him.

On presentation of the bill the owner exclaims "You can't charge me \$10,000 just for hitting the engine with a tiny hammer!". She takes the invoice back and scores out the \$10k adding - For striking engine with hammer, \$1. For knowing where to hit, \$9,999.

Knowledge is indeed power and knowing just where to look is the moral of this story. In the case of Airline Payments, this particular engine is also very complex and also extremely old. The process is made up of additions, alterations and repairs on top of other repairs made over the years.

Thomas Helldorff's Airline Payments Handbook is the key to 'knowing where to look'. This comprehensive book is a one-stop guide to understanding everything there is to know about airline payments.

It is a welcome update to the first edition, a well-established resource to many of us in this industry. It takes into account the numerous changes that have occurred over the last few years — such as the explosive growth in alternative forms of payments, smart phones, social commerce, biometric authentication and a raft of new regulation.

In one book you'll be able to learn about the intricate, complex and rapidly-changing world of airline payments and you'll know exactly where to tap to get your payments running smoothly!

Michael Smith

Chairman, Airline and Travel Payment Summit & Managing Partner, Ai Group Inc.

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# **Notes from the Author**

Where travel bots meet EDIFACT messages. It has been seven years since the first edition of this book came out. While a lot has happened, many things have not changed much. It is fascinating to observe the dual speeds at which the airline payment industry is developing – rapidly and at snail's pace – at the same time.

At the fringes, airlines around the world are rapidly adopting new distribution channels such as mobile apps, social commerce and Alsupported travel companions. Mobile phones in the hands of their passengers have fundamentally changed the way they interact with their customers, while creating ancillary revenue opportunities throughout the entire journey. The user experience has become a strategic differentiator and the payment path a crucial component within that. Customers expect to pay with a smile at their phone.

But at its core, airline payments still very heavily rely on systems and processes built many decades ago. They are based on global standards and mutual trust, allowing everyone around the world to collaborate and do business with each other.

But those processes and systems were designed to support payments based on card numbers, imprinted on carbon paper tickets — not mobile wallets or two-factor authentication.

Payment managers are being asked to do the 'impossible': They need to facilitate innovation in distribution and help grow the business — with systems designed almost half a century ago; at the same time saving costs and remaining compliant with regulatory, data security and data privacy requirements.

Knowing where to tap the engine to keep it running (to return to Michael's point above) is a challenge in itself. Changing or replacing it is another. The pressure, not only to mend and maintain the existing system, but to look for and build-out alternatives has never been greater. An exciting time and an exciting challenge!

This second edition of the book will allow you to take stock of your current environment. It will provide you with the foundation to embark on your personal "payment quest", however big or small, whether you are after that perfect airline payments job, want to enter this industry as a supplier or are actually working for an airline.

It is the essence of over 20 years of experience in the airline and payment industry, many discussions with airlines, industry peers and suppliers, anecdotes, conferences and my own experiences as a passenger. It is a snapshot of the current environment and I have tried to capture it as accurately as possible. But there are always things that can be improved on or that change. I look forward to your feedback, the experts in many of the areas that I have covered. The aim is to make this a "living document" for the airline payments community, reflecting our common understanding of the industry.

Thomas Helldorff the@payments.aero



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The book, of course, does not necessarily reflect the views of any of the organisations or people who have generously provided me with all forms of assistance.

# Introduction

"Accepting payment is a core activity of EVERY business, even airlines." This is how Ralph Kaiser, the President and CEO of UATP, once opened a discussion on "Managing the Evolving World of Payments". It still holds true. If an airline does not receive payments, it won't fly for very long. It is not only a core activity; it is an absolutely vital activity.

Traditionally this part of the distribution activity has been performed by travel agents. They processed the payments on behalf of the airlines and the funds arrived at the airlines' accounts almost automatically through various systems like the IATA Billing and Settlement Plan (IATA BSP).

To reduce the distribution costs associated with distribution through travel agents and Global Distribution Systems (GDS), airlines were keen to increase the proportion of direct distribution - through call centres, the internet, mobile, social media etc. The percentage of direct distribution has grown significantly since the early 90s. For low cost carriers this formed the core of their business model.

Airlines were quick to celebrate the savings made in this way, but this victory brought its own challenge, which many airlines around the world are still trying to get their heads around:

#### Being responsible for taking payment directly from the customer.

Travel agencies and traditional airline ticket offices had great flexibility when it came to taking payments, as even customers who had no banking relationship and no access to any sort of card-based payment methods could still purchase tickets – with cash. However, cash does not really work with these new, remote, direct-distribution channels, or through a call-centre, over the internet or via a mobile phone.

So, how would you sell flights online in a country with limited credit card usage? What forms of payment are available to your customers? What are your customer's payment expectations?

#### How do your customers want to pay? How can your customers pay?

All of a sudden this has become a major question. As airlines want to enter new markets, they need to be familiar with the payment methods that apply to that market.

But every payment method works slightly differently, is governed by various national rules and regulations, might require integration of additional partners and triggers adjustments to internal procedures. The risks and fraud potential have to be understood and financial flows adopted.

If an airline wants to reach new customer segments, they need to understand those segments' booking and payment behaviour. How would you keep up with passengers expecting an Uber-like experience?

All this has to be achieved within a very regulated and complex technical and organisational environment, as airlines typically are.

#### Taking payments is a complex and challenging task.

It involves multiple entities both inside and outside the organisation and as it is not really the core business of an airline, it is very often not fully understood.

Increased cost sensitivity within every airline regularly highlights another uncomfortable fact:

#### Taking payments is not only complex, it is also expensive.

Payment costs can be the biggest distribution cost element after GDS fees. Merchant fees of up to 3% are not uncommon, manual handling, and high fraud and fraud-related costs can add anything up to 2% on top of that. Many of the payment related costs are still not fully understood by the airlines, as they occur in different parts of the organisation and are not always directly attributed to the distribution business case.

These are only some of the challenges that those involved in payment processing often face. And they very often wish they had some

#### HELP!

Here it is - "The Airline Payments Handbook – Understanding the Airline Payments World"

This is what this book is all about: providing that all important help. It is an attempt to put together "all there is to know about airline payments" in a single reference guide, helping you to answer some of the most pressing payments questions.

- How do payments work?
- How do payments work in the airline industry?
- How do I define a payment strategy for my airline?
- How can I reduce my payment costs?
- How can I reduce fraud and improve risk management?
- How can I reduce payment complexity?
- How do I structure a payment implementation project?
- How do I select my suppliers?
- How can I turn payments into a strategic advantage?

For those new to airline payments, this handbook is a perfect first step to a better understanding of this topic and a great reference for all those ad hoc "What is that?" and "How does that work?" questions. For all those who work or "have to work" with payments, without payments being their primary field of expertise, this book is a welcome step-by-step guide through the challenges the world of payments brings with it. For the advanced payment reader, it is a superb reference guide for "best in class" payment handling and a source of inspiration for improvements in day-to-day business.

The guide is divided into four parts: Payment Basics, Payments in the Airline Industry (Distribution Channels and Back-Office Processes), "Your Payment Project" and a Supplier Directory.

#### Payment Basics – How does it all work?

Part One focuses on payment basics, giving the history of payments and the development of payment methods from coins and cash through to credit cards and alternative payment methods like mobile wallets. It examines the individual elements of a payment transaction as well as the costs and players involved in making that transaction happen. It also discusses the relevant legal frameworks, industry standards and compliance rules, such as the Payment Card Industry (PCI) standards. It analyses the risk management aspects for dealing with payments, looks at the responsibilities and risks of each of the players, payment fraud, fraud scenarios and fraud prevention tools. This part concludes with an analysis of the major institutions and organisations relevant to this industry.

#### Payments in the Airline Industry –

#### A Channel-by-Channel Analysis and Airline Back-Office Processes

The second and third parts apply the information from the chapters making up Part One to the airline industry specifically. They provide analysis of the various distribution channels, discuss the challenges of traditional channels such as travel agencies, call centres and ticket desks versus newer, direct distribution channels e.g. e-commerce and mobile, bots and social media. It also gives a window into on-board retail transactions, on-board telephone authorisations and emerging 'Chip & PIN' payments at kiosks, bag-drop and check-in desks. Each of these channels requires their own approach as the underlying infrastructure and the environment in which payment is taken varies greatly. They provide further investigation into the airline back-office processes required to support payment processing within an airline, such as order screening, transaction corrections, chargeback processing, transaction reconciliation and accounting.

#### My Payment Project - A Step-by-Step Guide

Part Four provides a blue-print for the implementation of a payment project, offering step-by-step guidance through the set-up and execution of such a project. It helps you to define a payment strategy for your organisation balancing (often opposing) requirements from various internal departments. It gives you tools to evaluate existing and potential new suppliers and to understand their product offerings and pricing strategies. It draws up an outline implementation plan and explains its execution, touching on software development, support process adaptations, testing and on-going monitoring processes.

The book concludes with a directory of contact details for a variety of industry players and suppliers including Payment Service Providers, acquiring banks, fraud management solution providers, currency conversion experts, consultants, conferences organisers and media.

Our website provides further regularly updated information on these topics:

#### www.payments.aero

# Part I. Things you should know before you start

Have you ever wondered how it is that you can fly halfway around the world to arrive in some foreign country, where you get in a limo to take you to your final destination; and to pay for all this, you don't need cash, you don't even have to pull out a colourful little plastic card anymore — you just step out of the taxi and ... payment just happens ... invisibly. The driver does not know you and no money changed hands in that moment ... a miracle?

How was this system of paying for your purchases developed? Where did it come from? It may look easy from the user's perspective, but behind it lies a very complex system of relationships and technology. This section takes a look behind the scenes at payments and explores the systems, the players and the infrastructure that allow this to happen.

#### 1 History of Payment – from Cards to Wallets

#### 1.1 Introduction

The exchange of goods and services has always been a central part of society. Coins and bills support this exchange and evidence of these can be found as far back as 3000 B.C. in Mesopotamia. However, it is not always convenient to carry money around to pay for what you need, especially for larger value purchases or when travelling. If you can't pay immediately though, how do you get a potential merchant to trust you and hand over the items or services you want in return for a promise to be paid later? It was this requirement, the ability to be able to access to your funds from a distance, which drove the development of the payment systems we have today.

#### 1.2 Charge Cards and the Origins of Payment Cards

Payment cards have been around for just over 100 years. The first paper cards were introduced in the early 1900s by big department stores in the US They were issued to preferred customers, who were allowed to defer payments for purchases they made. In 1914, Western Union were the first to hand out small metal cards (later known as "Metal Money") to their premium customers, again allowing them to get interest-free deferred payments. In the early 1920s, large oil companies picked up on this idea and started to issue similar metal cards, specifically for petrol and automotive services.







Fig 1: The "Air Travel Card", Predecessor of the UATP Card (Courtesy of UATP)