

Journal of International Economy and Business

A join edition of the Institute of Social Sciences and Institute of Technologies of Perun Academy
Publishing Company: PSP Publishing
ISSN: 2367-6035
Issue 12, Year XII (2024)
Founding Editor and Editor-in-Chief: Pavel Stoynov

Editorial Board: Goran Karanovic (Croatia), Bisera Karanovic (Macedonia), Radmila Jovanovic (Serbia), Tanja Angelkova (Macedonia), Daniel Belingher (Romania), Alexandru Bodislav (Romania), Roberta Stanef (Romania), Zeljko Bjeljac (Serbia), James Osondu (Nigeria)

Contents

P. Stoynov and H. Stoyanov. Development of TourBiz.....3
P. Stoynov and H. Stoyanov. Pricing, Information Services and Automation in Tourism…….....7
P. Stoynov. Security indeces of NATO after last enlargement to east. Comparison to Russia.……...……..12

Development of TourBiz

Pavel Stoynov
Perun R&D Academy,
Faculty of Technologies
Hristo Stoyanov
Perun Consulting Ltd., Los Angeles, California, USA

Abstract.
TourBiz is a software platform under construction for booking touristic packages serving travel agents, travel operators and customers. The development of the platform started in 2024.
In this article, we consider the design of the platform and some specific features of the project.
Keywords: on-line platform, touristic platform, development, design

Introduction

The idea for creating the touristic platform TourBiz appeared in 2023 in a small team around PERUN group of companies located mainly in EU (Bulgaria) and in USA (California). The core of the idea was to create a platform where travel operators may share their offers between each other as well as with travel agents. Travel agents take the shared touristic packages and sell to customers taking some percentage from the sell.
The platform is at stage of development at that moment with continuing design of some modules.
In this article, we consider the design of the platform and some specific features of the project.

TourBiz specifics

Tourbiz (Tourbiz, 2025a; TourBiz, 2025b) is a market place where wholesalers and resellers in tourism industry meet. The wholesalers are large travel operators and resellers are small travel operators and touristic agents.
The central part of the product is the List of offers where offer is any actual touristic product created and owned by a wholesaler and traded by several retailers.
The offers have many attributes which form the products diversity.
The resellers sell touristic offer from the name of the wholesaler and receive a commission from the wholesaler who owns the product for every product sold.
TourBiz will be attractive to re-sellers because it provides:
1. Easy way to search database with latest wholesaler offers.
2. Ability to send customized emails in an email campaign to list of potential clients.
3. Easy to create templates for preparing paper marketing materials (such as pamphlets, flyers, etc.)
TourBiz will be attractive to wholesalers because it helps them:
1. Easy way to assemble complete packages from separate parts (hotel, flights, trips, etc.).
2. Proper pricing of products.
3. Easy way for booking, invoicing, etc.

Product editions and modules

TourBiz has two main editions:
1. B2B edition. With this edition, travel operators put their original products into platform. Travel agents enter the platform, select products which they want to sell and either take them to their site like iframe or obtain them into their area of the platform. After that agents just sell selected products using the platform or their sites.
2. B2C edition. With this edition, travel operators put their original products into platform. Then travel agents and clients buy the products they like directly from the platform.
TourBiz has several main modules: Database for storing products and customer accounts; Dashboard for browsing and filtering products; Trade module which permits to book, buy and pay products, Login and security module, Products desine module, Statistics module, Blogs and Ads module, AI module etc.

Global Design of TourBiz

The Database of TourBiz is organized around some key objects.

A main object is the touristic product offered in TourBiz which is a complex hierarchical structure.

In TourBiz, some specific roles of users are defined:

1. Wholesaler - this is a large tours operator that is offering tourist products in bulk to smaller tourism re-sellers.

2. Reseller - resellers combines and re-sells products from one or more larger wholesalers to prepare complete packaged product for individual clients. Resellers run their own marketing campaigns for reaching out and selling to clients.

3.Client - client is the ultimate buyer of tour packed products. Clients typically buy from re-sellers, but can also buy from wholesalers directly.

The basic use cases are:

1. Wholesalers create touristic products

2. Wholesalers distribute their products (by email, through their sites or in other way)

3. Wholesaler contracts/sells products and exchange money

4 . Reseller receives product offers

5 . Reseller extract products data from input channel and loads them into its output channel

6. Reseller Finds clients and sells them products bundles

7. Client buys products and pay for them

After creating and testing their product and after setting all prices, fees and commissions related to the product, the Wholesalers offer the product for selling to clients as well as to marketing agents (Resellers).

This process of gathering offers and managing them till the final sale to the final client is automated by TourBiz.

The Reseller make reservations with final clients. The Wholesalers are informed by Resellers about the reservations and sales performed by Resellers.

The Resellers communicate with Clients and Wholesalers to ensure the quality of the touristic package.

The Reseller receive payments form clients and transmit the payments to the Wholesalers keeping the commission due according to the pre-signed contract between Wholesaler and Reseller.

Main TourBiz functionalities are:

1. Create and control products. The system helps easy to create complete touristic products including transportation, accommodation and additional services. The product created by the system can be monitored and managed. At every time there is available information about the number of free places and number of reservations as well as about for financial parameters and revenues from product.

2. Document preparation - automatic creation of documents package (contracts, accounting documents and financial reports). The system helps easy to prepare different documents related to the company activity: legal, accounting or financial documents.

3. Control of reservations and payments (control available capacity, fulfillment and check payments). The system provides easy control of reservations and payments. For every product, it is possible to track the product capacity in terms of number of tourists as well as the number of the reservations made and paid partially or completely.

4. Clients database (introducing clients and segmentation based on customised parameters). The system provides a easy way to create bases of clients in different markets. The database may be further used for different reports, segmentations by geographies, markets and other parameters. In the base, analyses can be performed to support making decisions.

5. Agent commission (easy, understandable and clear calculation of agent bonuses). The system provides a way to calculate and communicate easily the commission which will be paid to an agent for every touristic package provided by him.

TourBiz potential APIs

The platform TourBiz will provide information about bus, airplane or ship travel scheduling and pricing as well as information about hotel services, and possibility for hotel booking and payment. This information can be obtained through specialized APIs of dedicated service providers.

Some potential API providers are:

1. Wanderu (2025). Web Service API: Available. Pricing Model: Varies by carrier (depends on bus/train routes). Restrictions: No specific restrictions mentioned. Geographic Coverage: United States, Canada, Mexico, and Europe. Sales & API Contact: Contact Wanderu. Sent mail on 6.07 to contact@wanderu.com.

2. FlixBus (2025). Web Service API: Available. Pricing Model: Varies by route (prices start as low as 5 EUR). Restrictions: No specific restrictions mentioned. Geographic Coverage: 20 European countries. Sales & API Contact: Contact FlixBus.

3. Amadeus (2025). One of the largest travel technology providers. 40% of global travel market. 24.6% market share, $5.5B revenue. Leader. Web Service API: Available. Pricing Model: Various pricing plans based on usage and product. Transaction-based or subscription. Tiered pricing based on volume. Restrictions: API key required, terms and conditions apply. Requires approval and contract. Limited by contract; usage quotas may apply. Geographic Coverage: Global. Sales & API Contact: Amadeus Developer Contact. api@amadeus.com, https://amadeus.com/en/contact , https://developers.amadeus.com/

4. Sabre (2025). 21.5% market share, $4.2B revenue. One of the leading technology providers in the travel industry. 15% of online travel bookings. Web Service API: Available. Pricing Model: Custom pricing based on usage. Subscription-based or Transaction-based. Varies by product. Restrictions: API key required, terms and conditions apply. Requires certification. Limited by contract; usage quotas may apply. Geographic Coverage: Global. Major player; strong presence in North Americ. Sales & API Contact: Sabre Developer Contact. www.developer.sabre.com, https://www.sabre.com/contact-us/ https://developer.sabre.com/

5. Expedia (2025). One of the largest Online Travel Agencies (OTA); strong presence in North America. 16.3% market share, $2.5B revenue. Web Service API: Available. Pricing Model: Commission-based. Transaction-based fees. Transaction-based commission model. Restrictions: Approval required for commercial use, terms and conditions apply. API key required. Geographic Coverage: Global. Sales & API Contact: Expedia Affiliate Network Contact.

6. Booking.com (2025). One of the largest online travel agencies, specializing in accommodations. Largest OTA by room nights. Web Service API: Available. Pricing Model: Commission-based. Restrictions: Approval required, terms and conditions apply. Partner approval needed. Geographic Coverage: Global. Sales & API Contact: Booking.com Affiliate Partner Program Contact. connecthelp@booking.com

7. Skyscanner (2025). A leading global travel metasearch engine.Web Service API: Available. Pricing Model: Various pricing plans based on usage. Pay-per-booking. Restrictions: API key required, terms and conditions apply. Application approval required. Geographic Coverage: Global. Sales & API Contact: Skyscanner API Contact. partners@skyscanner.net

8. Trainline (2025). A major European train ticket retailer. Web Service API: Available. Pricing Model: Custom pricing based on usage. Restrictions: API key required, terms and conditions apply. Geographic Coverage: Europe (primarily), expanding globally. Sales & API Contact: Trainline API Contact

9. Deutsche Bahn (2025). Dominant in German rail. Web Service API: Available. Pricing Model: Free for developers. Restrictions: Limited to German rail. Geographic Coverage: Germany. Sales & API Contact: apis@deutschebahn.com

10. SNCF (2025). French rail operator. 5.8% market share, $1.1B revenue. Web Service API: Available. Pricing Model: Tiered based on usage. Restrictions: Focused on French rail. Geographic Coverage: France, Europe (rail focus). Sales & API Contact: api@sncf.fr.

11. Travelport (2025). Major player; focus on business travel segment. Web Service API: Available. Pricing Model: Transaction-based or subscription. Restrictions: Limited by contract; usage quotas may apply. Geographic Coverage: Global. Sales & API Contact: https://www.travelport.com/contact https://developer.travelport.com/

12. Google Flights (2025). High user traffic; not strictly a B2B solution. Web Service API: Limited API acces. Primarily for personal use. Pricing Model: Transaction-based or subscription. Restrictions: Restricted to non-commercial use. Geographic Coverage: Global. Sales & API Contact: https://duffel.com/blog/google-flights-api.

13. Lufthansa Systems (2025). 10.2% market share, $1.1B revenue. Web Service API: Lufthansa API. Pricing Model: Custom pricing for airlines. Restrictions: Usage agreements required. Geographic Coverage:Global (aviation focus). Sales & API Contact:

14. Hotelbeds (2025). Web Service API: Hotelbeds API. Pricing Model: Commission-based, tiered pricing. Restrictions: Terms and conditions apply. Geographic Coverage: Global (accommodation focus).

15. Ryanair (2025). Web Service API: Yes, Ryanair API. Pricing Model: Commission-based, tiered pricing. Restrictions: Terms and conditions appl. Geographic Coverage: Europe (aviation focus)

16. Rate Hawk (2025). RateHawk.com is a part of the Emerging Travel Group. 2.5M+ accommodation facilities across the world. 250+ worldwide suppliers. 92K+ direct contracts. 115K+ partners. Web Service API: Yes, https://docs.emergingtravel.com/#intro. Pricing Model: Commission-based, tiered pricing. Restrictions: Terms and conditions apply. Geographic Coverage: Global (hotels focus). Sales & API Contact: support@ratehawk.com.

17. Kayak (2025). Web Service API: Yes, KAYAK Search-Widget API. Pricing Model: Commission-based, tiered pricing. Restrictions: The API solution can be offered on a limited basis only, based on assessment

of your website, traffic and marketing plans. Geographic Coverage: Global. Sales & API Contact: shttps://www.kayak.com/affiliate/help/widget.

18. Omio (2025). Web Service API: Yes. Restrictions: The API solution can be offered on a limited basis only, based on assessment of your website, traffic and marketing plans. Geographic Coverage: Europe (Trains, Buses, Flights, Ferries). Sales & API Contact: affiliate@omio.com.

19. Google Hotels (2025). Web Service API: Limited API access. Primarily for personal use. Pricing Model: Transaction-based or subscription. Restrictions: Restricted to non-commercial use. Geographic Coverage: Global.

Conclusion

The product TourBiz must provide diverse and sophisticated services for travel angencies and tour operators as well as the final clients.

To this end it should be properly designed, with suitable balance between the modules which are part of TourBiz itself and the APIs proposed by external providers.

References

Amadeus (2025) https://www.sellingplatformconnect.amadeus.com/. Last seen: February, 2025.

Booking (2025) booking.com. Last seen: February, 2025.

Deutsche Bahn (2025) www.bahn.de. Last seen: February, 2025.

Expedia (2025) https://www.travelopro.com/ean-expedia.php. Last seen: February, 2025.

FlixBus (2025) global.flixbus.com. Last seen: February, 2025.

Google Flights (2025) https://duffel.com/blog/google-flights-api. Last seen: February, 2025.

Google Hotels (2025) https://www.google.com/travel/search. Last seen: February, 2025.

Hotelbeds (2025) discover.hotelbeds.com. Last seen: February, 2025.

Kayak (2025) www.kayak.com. Last seen: February, 2025.

Lufthansa Systems (2025) www.lhsystems.com. Last seen: February, 2025.

Omio (2025) https://www.omio.com/. Last seen: February, 2025.

Rate Hawk (2025) www.ratehawk.com. Last seen: February, 2025.

Ryanair (2025) www.ryanair.com. Last seen: February, 2025.

Sabre (2025) www.sabre.com. Last seen: February, 2025.

Skyscanner (2025) www.skyscanner.net. Last seen: February, 2025.

SNCF (2025) www.groupe-sncf.com/en. Last seen: February, 2025.

TourBiz (2025a) https://tourbiz.us. Last seen: February, 2025.

TourBiz (2025b) https://tourbiz.eu. Last seen: February, 2025.

Trainline (2025) www.thetrainline.com. Last seen: February, 2025.

Travelport (2025) https://www.travelport.com/. Last seen: February, 2025.

Wanderu (2025) wanderu.com. Last seen: February, 2025.

Pricing, Information Services and Automation in Tourism

Pavel Stoynov
Perun R&D Academy,
Faculty of Technologies
Hristo Stoyanov
Perun Consulting Ltd., Los Angeles, California, USA

Abstract.
In this article, we consider pricing, information services and automation in tourism industry.
The article illustrates information needs in tourism and importance of automation of information management through suitable IT platforms.
Keywords: pricing, information services, tourism, automation

Introduction

Running a successful travel agency requires more than selecting prime destinations and securing comfortable accommodations.

One critical element for sustained success is mastering strategic pricing. For a travel agent, effective price-setting can maximize profits, maintain competitiveness, and attract a diverse clientele.

Another critical element for sustsined success is the effective information exchange. This includes selecting suitable information services for the company and selecting suitable chnanels for transmitting received information augmented with the information about touristic products themselves.

Information services for travel operators and travel agents can be divided into three groups: provision of touristic and general business information and content, provision of education and trainings in the area of tourism and provision of IT and automation of the business processes in tourism.

An example of company providing educational services is GatewayTravel (2025). It is a company with six employees – the owner, a director operations and four people at the position agent support. The support is through education, implementing industry-leading technology, and marketing. It maintains also a blog with topics in the area of marketing and destination guides.

An example of company providing general touristic information and content is Travel Pander (2025m) – a company which provides blogs with advises and useful info for travelers.

Another example is Travel and Tour World (2025) - the premier B2B integrated media platform in the travel and tourism industry reaching more than 5000000 readers globally. Dedicated to travel, tourism, airlines, cruises, technology and hospitality TTW serves as a powerfull promotional partner, supporting more than 1200 major international events, including WTM events,ITB Berlin, IMEX America & Frankfurt, AIME, TIS, IT&CM Asia, and many more.

In this article, we will present different ways for strategic pricing in tourism industry and will consider companies and platforms providing IT aitomatization in tourism.

Strategic pricing and pricing models in tourism

Strategic pricing is the intentional approach to setting service prices that align with your business objectives. It goes beyond simply covering costs; it involves an in-depth understanding of market trends, competition, and customer perceptions to deliver value that appeals to clients and enhances your bottom line.

According to the Harvard Business Review, "pricing is the most important lever a company can use to boost profits quickly."

This is especially true for travel agents in a competitive market.

Here are several ways for pricing.

Cost-Plus Pricing: a fundamental strategy where you calculate the total cost of services and add a markup to ensure profitability.

Competitive Pricing: Travel agents must analyse competitors' pricing for similar services and set attractive rates while safeguarding potential earnings. A SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) helps evaluate your market position. This enables you to price services competitively and highlight your unique offerings.

Value-Based Pricing: It focuses on setting prices based on the perceived value to the client rather than solely on costs. This involves assessing the unique benefits and experiences your services provide.

Communicating this value effectively can justify higher prices, as clients are willing to pay more for distinctive, high-quality experiences.

Dynamic Pricing: Dynamic pricing involves adjusting prices based on real-time demand, customer behavior, and external factors such as seasonality. This strategy ensures that you maximize revenue opportunities by offering higher prices during peak times and discounts during low-demand periods. Implementing advanced pricing tools can optimize these adjustments and enhance profitability. Richard Branson, the founder of Virgin Group, states, "Flexibility in pricing, aligned with customer demand and market conditions, is key to sustaining a profitable business in the travel industry."

Bundling and Discount Strategies: Offering bundled services or special discounts can also be part of a strategic pricing plan. Bundling services, such as combining flights, accommodations, and activities, provides perceived added value and convenience for clients. Additionally, targeted discounts for early bookings, loyal customers, or special occasions can incentivize purchases and foster long-term client relationships.

Travel Management Companies (TMC) use three primary pricing models. There's the travel subscription pricing model, the transaction fee model, and the flat fee model.

The travel subscription pricing model allows you to pay one set payment each month (or another frequency). Then, you get a set suite of services, just like any subscription.

The transaction fee model charges you for a la carte services.

The flat fee model charges you for a bundled mix of services.

The travel subscription pricing model is straightforward and easy to understand. It works just like any other subscription you might pay for. You pay a monthly, quarterly, or annual fee. Then, you receive a set number of benefits and services for that fee. You may get, for example, unlimited reporting and booking services. You might also get extra perks, like unlimited Traveler assistance.

Your cost for the subscription may differ according to how many people you have on the subscription using the travel services, as well as your general travel needs, such as how many trips your teams take per year. Likewise, your fee will differ according to the TMC you sign with.

The more you use the unlimited services within your subscription, the more value you get from the subscription.

There are myriad benefits to partnering with a TMC that offers the travel subscription pricing model.

For one, the set monthly, quarterly, or annual fee makes it easy for you to know how much you're spending for your TMC service. Additionally, as is the case with any subscription service, the reward is a lower upfront cost, regardless of the number of transactions covered. Thus, overall travel spend is typically reduced, and you'll have a better handle on travel spend.

Furthermore, the subscription model can reduce all the time spent processing travel costs. This frees up accounting and finance teams for higher value-driven work.

Likewise, you may get certain features and perks with your subscription for free that you wouldn't normally buy. These can make your Travelers' experiences less stressful and more seamless. It will make the entire business travel process easier, more rewarding, and more productive for everyone.

Of course, there are downsides to travel subscription pricing models, too.

For one, because it is a subscription, your services and benefits are limited to whatever it is that the subscription entails. You might not necessarily be able to call up your TMC and ask for services when needs arise unexpectedly. If you are able to do so, you may find that you incur a fee.

Additionally, you may not find that you use the travel subscription enough to get your full money's worth. If your travel slows down or your team doesn't have the same travel needs that it once did, you could fail to see a return on your investment. Likewise, if your team travels extensively in one part of the year and not in the rest of the year, you may find it frustrating or useless to pay for a full year's subscription.

Finally, the subscription pricing model may be less suitable for larger corporations, as the model may make it difficult to deal with centrally billed costs if the program covers the company's different (global) entities. The easiest solution for this is to share the cost of the subscription fee, much in the same way a company might share the cost of software licenses across the organization.

Generally, travel subscription pricing models are best for SMEs with a smaller number of Travelers. Likewise, it's good for an SME with a number of Travelers who will use the same subscription services over and over again.

The travel subscription pricing model is also a nice option for those SMEs who do not have any Travel Manager or similar individuals on staff. The company might need to outsource all aspects of travel management, from duty of care to reporting and beyond. A subscription can ensure these tasks are covered without the need to hire a full-time staff member.

The travel subscription pricing model is not ideal, though, for companies with a large number of Travelers (so many that the subscription cannot accommodate all of them). It is also not ideal for companies with very complex travel needs. They may need more hands-on help from a Travel Manager.

Selected automation platform in tourism

TourWriter (2025) is a software platform which proposes everything that tour operator needs to create, price, book and sell itineraries.

We Travel (2025) is a booking and payments platform for multi-day and group travel businesses. It maintains also academia which offeres courses for professionals. Courses are free and provide certificates.

TravelPerk (2025) is an all-in-one, end-to-end travel management system with a comprehensive digital platform for businesses and corporate travellers. It offers a free starter plan and paid plans with additional features such as concierge services and savings on VAT-ready invoices.

Sabre (2025) is a software and travel technology provider that offers solutions for various travel companies, including OTAs, leisure travel agencies, and tour operators. Sabre also operates as a Global Distribution System (GDS), helping travel suppliers distribute their products.

Ezus (2025) is a cloud-based travel planning software platform designed for agencies, DMCs, and inbound and outbound tour operators. It specializes in creating customized trips, budgets, and itineraries for individual and group travel.

Dolphin Dynamics (2025) is a travel technology company providing software modules for TMCs, leisure agents and tour operators. Their products include booking engines, backoffice and CRM systems.

Travelport (2025) is a web-based GDS and retail travel platform that connects travel agencies with travel service providers. It aggregates information from airlines, hotels, and car rental companies, enabling agents to compare and choose travel options.

Lemax (2025) is aA travel agency and tour operator software solution that helps businesses streamline operations, manage bookings, and maximize customer experiences. It offers automated sales workflows, reporting engines, and multilingual quotes, invoices, and travel itineraries.

Juniper (2025) is a travel technology company aimed at OTAs, DMCs, and wholesale tour operators. Their software suite includes a booking engine and a distribution network hub to help businesses create personalized vacation packages and expand globally.

TravelWorks (2025) is a cloud back-office system for travel agencies and tour operators, offering features such as invoicing, account receivable, general ledger, real-time advanced reports, and a mobile app.

Zaui (2025) is a reservation and management software designed for shuttle companies, tour, activity, and rental operators. It offers centralized operations management, a booking engine, mobile and Point-of-Sale apps, inventory management, and online reseller channels.

Softrip (2025) is a fully integrated, end-to-end business software for tour operators, providing reservations, product management, operations, CRM, marketing, reporting, and integrated payments modules.

Avochato (2025) is a text messaging solution for travel agents, creating a dedicated phone number for the business. It integrates with various services, including Slack, Office 365, Salesforce, and Google AdWords.

Rezdy (2025) is an online booking technology that integrates with websites to provide a convenient and consistent booking experience for customers.

Hero (2025) is a smart, cloud-based, B2B travel booking platform for in-store and online sales.

TrekkSoft (2025) is a booking software for tour and activity companies, offering features such as online reservation, booking management, and payment processing.

PenAir (2025) is a complete travel agency management system that integrates with Stripe, Worldpay, and eFax.

TripCreator (2025) is a travel management software that integrates with Stripe, Pixabay, and PayPal.

Experitus.io (2025) is a feedback and review management software for tour companies that integrates with Stripe, WordPress, and PayPal.

Payment processors and their pricing

An integral part of automation tools in tourism are the payment processors.

Payment processors are vendors that manage the logistics of accepting credit and debit card payments. They ensure the security of online payments, verify customers' bank accounts and lines of credit, and safeguard customers' financial information.

There are several payment processors available, each with its own pricing structure. Here are some popular options:

Square (2025) is a popular payment processor recognised for its white card terminals and thumb-sized card readers. It has a clean, simple, and easy-to-understand interface. Square charges 2.6% per in-person purchase and 2.9% plus 30 cents per online transaction. Hardware costs between $10 and $149.

Payment Depot (2025) charges a monthly membership fee of $79, along with an additional flat fee per transaction, ranging from 15 cents for the least expensive plan to 7 cents for the most expensive plan. It offers flexibility in hardware payment terminals or point-of-sale systems.

Stripe (2025) is a highly customisable payment processor designed for web developers. It allows users to accept credit cards, debit cards, and some cryptocurrency payments in over 130 currencies. Stripe charges 2.9% plus 30 cents per successful card transaction and integrates with Shopify stores.

PayPal (2025) is a good option for low-volume transactions and has no monthly or minimum balance fees. It is used worldwide in over 200 countries and 26 currencies. PayPal charges 2.9% plus 49 cents per standard credit and debit card transaction in the US, 2.29% plus 9 cents for QR code transactions, and 3.49% plus 49 cents for other commercial transactions, including PayPal Checkout.

Payline Data (2025) enables merchants to accept payments online, in-store, and through a mobile app. It offers cash advances, customer insights, QuickBooks integration, and well-reviewed customer service. Payline Data operates on a month-to-month contract basis and charges interchange plus 0.4% and 10 cents per card-swipe transaction, and plus 0.75% and 20 cents per online transaction.

When selecting a payment processor, it is essential to consider the fee structure, the need for international currency processing, and various other factors, such as initiation or startup fees, transaction fees, equipment costs, gateway fees, chargeback liabilities, address verification fees, and termination fees.

In next part, we will consider in details Strype.

Stripe for Travel cpmpanies

Travel agencies are considered high-risk for card acceptance due to a combination of factors, including high chargeback rates, high-value transactions, third-party payments, and extended delivery times. The primary reason for this categorisation is the high risk of chargebacks, which occur when customers cancel trips they have paid for in advance and request a refund, often by filing a chargeback claim with their card provider.

As a result, travel agencies are deemed a high-risk industry by most payment processors, and many do not approve them for card acceptance. However, some payment processors, like Stripe, are used by travel agencies to handle their transactions.

Stripe maintains a list of prohibited and restricted businesses that cannot use its services. The list is representative but not exhaustive, and the company reviews each account and relevant information upon activation to determine whether a business is supportable.

Prohibited businesses are: travel reservation services and clubs, commercial airlines, and cruises. Restricted businesses are: content creation platforms, regulated industries, financial products and services, pharmaceuticals, medical devices, and telemedicine.

Integration of Stripe with travel agency software are however done for companies like WeTravel, Zaui, Rezdy, TrekkSoft, Hero, Tourwriter, Planyo, Tashi.travel, TravelDesk, TripCreator, Experitus.io, PenAir. Pricing 2.9% and $0.30 per charge, with a 2-day rolling basis for payouts. Disputed payments incur a $15 fee.

To summarise, travel agencies are considered high-risk for card acceptance due to elevated chargeback rates, high-value transactions, third-party payment complexities, and extended delivery times. These factors collectively increase the perceived risk for financial institutions, making it challenging for travel agencies to secure traditional merchant accounts.

One example of a third-party processor that integrates with Stripe is WeTravel. WeTravel is a leading vertical SaaS for the multi-day travel industry, providing FinTech and SaaS solutions to manage trip bookings, collect travellers' payments, and pay vendors. It has been integrating with Stripe Connect since 2014. With WeTravel, users can handle payment processing, financial reporting, and payouts as per the terms of their own Stripe account.

Another option is to use a host agency's merchant account to process trip payments. Gifted Travel Network, for instance, allows independent contractors to charge clients directly for travel booked under the host agency's credentials. Nexion Travel Group also offers a similar service, where members can manage group travel or charge service fees through the myNexion platform.

It is important to note that travel agencies are considered a "high-risk" industry for card acceptance due to the large expenses, advance payments, and absence of the credit card during the transaction. As a result, most payment processors will not approve them for card acceptance. Stripe, for instance, lists "travel reservation services and clubs; airlines; cruises" under its "restricted businesses" list but may allow these businesses to be eligible for processing "with explicit prior approval".

Conclusion

Information volume and speed of change in tourism will grow more and more in near future, including price information, information services, business content, professional training info.

Because of this automation of information processing will become crucial fur successful touristic business.

So the need of software platform automating information and business processes management will increase.

References

Avochato (2025) www.avochato.com
Dolphin Dynamics (2025) www.dolphind.com
Ezus (2025) ezus.io
Experitus (2025) experitus.io
GatewayTravel (2025) https://www.gatewaytravel.com/
Hero (2025) herotravelsupply.com
Juniper (2025) be.junipertraveltech.com/en/
Lemax (2025) www.lemax.net
Payline Data (2025) paylinedata.com
Payment Depot (2025) paymentdepot.com
PayPal (2025) www.paupal.com
PenAir (2025) activebsolutions.com/penair
Rezdy (2025) rezdy.com
Sabre (2025) www.sabre.com. Last seen: February, 2025.
Softrip (2025) www.softrip.com
Square (2025) squareup.com
Stripe (2025)
TourWriter (2025) https://www.tourwriter.com/
Travel and Tour World (2025) https://travelandtourworld.com
Travel Pander (2025) https://travelpander.com
TravelPerk (2025) www.travelperk.com
Travelport (2025) https://www.travelport.com/. Last seen: February, 2025.
TravelWorks (2025) travelworkssolution.com
TrekkSoft (2025) www.trecksoft.com
TripCreator(2025) www.tripcreator.com
WeTravel (2025) https://www.wetravel.com/
Zaui (2025) www.zaui.com

Security indeces of NATO after last enlargement to east. Comparison to Russia

Pavel Stoynov
Perun R&D Academy,
Faculty of Social Sciences
Department of Politology,
pavel_todorov_stoynov@yahoo.com

Abstract.
Since 1949, NATO's membership has increased from 12 to 32 countries through 10 rounds of enlargement. Sweden became the latest country to join the Alliance on 7 of March 2024. Also, three partner countries have declared their aspirations to NATO membership: Bosnia and Herzegovina, Georgia and Ukraine.
The article provides an estimation of two security indeces of NATO as a group of countries and compares them to the corresponding estimate for Russia using the methodology developed by Stoynov (2022).
Keywords: economics, politics, security, NATO, Russia, security indeces.

Introduction

Since 1949, NATO's membership has increased from 12 to 32 countries through 10 rounds of enlargement. Sweden became the latest country to join the Alliance on 7 of March 2024. Also, three partner countries have declared their aspirations to NATO membership: Bosnia and Herzegovina, Georgia and Ukraine.
Today, after Finland joined NATO, common land border between NATO and Russia is 2550 km. This long common border could be basis for direct conflict between the two rivals.
The article provides an estimation of two security indexes of NATO as a group of countries and compares them to the corresponding estimate for Russia using the methodology developed by Stoynov (2022).

Security indeces

An Economic Security Index (ESI) is defined as a combination of the following indicators: GDP, GDP PPP, GDP growth, population, territory, degree of openness and debts.
The main index of economic security is calculated according to the formula:

$$I_{ESI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6} - \frac{(E+I)}{10^{12}} - \frac{D}{10^{12}},$$

where P_R is the real GDP (PPP), P_N is the nominal GDP, g is the growth of the economy in percents, N is the population, A is the territory, in square kilometers, E is the export, measured in currency, I is the import, also in currency units, D is the total debt, measured in currency, such as the dollar.

The sub-indices here are: production and growth index $I_P = \frac{P_R + P_N}{2*10^{12}}(1+g),$ population index $I_N = \frac{N}{10^8},$ territory and resource index $I_A = \frac{A}{10^6},$ degree of openness of the economy defined as $O = \frac{(E+I)}{10^{12}},$ the degree of indebtedness of the economy $I_D = \frac{D}{10^{12}}.$

The production and growth index is an indicator of the economic strength and competitiveness of a country. A country is more protected from economic risks, the larger its economy. This index includes growth as the main economic value.
The population index is related to the provision of the economy with labor resources. It can be supplemented with a study of the age structure of the population, the share of the labor force and employment.
The territory index is related to the provision of the economy with natural resources. Its study can be supplemented by a study of the geographical position, the access to the seas, the size of the territorial waters and the exclusive economic zones in the adjacent seas and oceans, the natural resources on the territory and the density of the population living on this territory.

The Economic Openness Index is a measure of how dependent a national economy is on the economies of other countries for its functioning. The presumption is that during serious international crises and confrontation, a country's dependence on imported goods and services and on markets for the realization of its own production abroad can create serious difficulties for the economic system in the event of a disruption in supply and distribution chains.

It is this vulnerability of economies that is exploited in the imposition of economic sanctions and other forms of economic confrontation. By stopping or limiting the inflows and outflows of goods and services to a country, the enemy disrupts the economy and weakens the country's economic potential.

Therefore, the openness of the economy is considered a weakness of the economy during wars and conflicts and is taken with a minus sign when determining the economic security index.

The indebtedness index is also taken with a minus sign because it presents debts as a potential weakness for the economy.

The first three summands in the formula for the index of economic security form the index of domestic economic strength:

$$I_{EPI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6}.$$

It follows that the index of economic strength is equal to the index of economic security, adjusted so as not to take into account the degree of openness and the degree of indebtedness.

The measurement of the relevant indicators is usually done by the national statistical institutes of the respective countries or by various international organizations.

The Political Security Index (PSI) of the country is based on the indicators: number of armed forces, production of the military-industrial complex, population, territory, import of armaments.

The main index of political security is calculated according to the formula:

$$I_{PSI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6} + \\ + \frac{M}{10^6} + \frac{H}{10^3} + \frac{1}{2}\left(\frac{S_1}{10^6} + \frac{S_2}{10^2}\right) + \frac{C}{10^3},$$

where M is the number of armed forces, including regular army, reserves and paramilitary units, H is the number of nuclear warheads, S_1 is the total tonnage of warships, S_2 is the total number of warships, C is the total number of military aircraft in the military of the respective. The subindex

$$I_{PMPI} = \frac{M}{10^6} + \frac{H}{10^3} + \frac{1}{2}\left(\frac{S_1}{10^6} + \frac{S_2}{10^2}\right) + \frac{C}{10^3}$$

here is called the index of military-political power and is denoted by I_{PMPI}.

Several sub-indices are included within the military-political power index as follows: military staff index $I_M = \frac{M}{10^6}$, nuclear forces index $I_H = \frac{H}{10^3}$, navy index $I_S = \frac{1}{2}\left(\frac{S_1}{10^6} + \frac{S_2}{10^2}\right)$ and air force index $I_C = \frac{C}{10^3}$.

Security indeces of NATO

The product and growth index of all NATO countries is

$$I_P = \frac{P_R + P_N}{2*10^{12}}(1+g) = \frac{64255200000000 + 64255200000000}{2*1000000000000}2{,}3 = \\ = \frac{2*64{,}3}{2} * 2{,}3 \approx 147{,}9.$$

Here GDP PPP 64 255 200 000 000 Int $ is taken from WorldEconomics (2025) for 2024. Nominal GDP is approximated with the same number. Compound Annual GDP growth is taken from World Economics (2025a) is provided for the period 2021-2024.

The population index is calculated based on the data for population of NATO countries in World Data (2025) which is 972,26 million. It is

$$I_N = \frac{972260000}{10^8} \approx 9{,}7.$$

The territory and resources index is:

$$I_A = \frac{A}{10^6} = \frac{25700000}{10^6} \approx 25{,}7.$$

Data about territory are taken from World Data (2025).

The degree of openness of NATO economy 2023 is estimated based on the data provided in OEC World (2025):

$$O = \frac{(E+I)}{10^{12}} = \frac{9040000000000 + 10700000000000}{1000000000000} \approx 19{,}7,$$

The indebtness of NATO countries is

$$I_D = \frac{D}{10^{12}} = \frac{53345110000000}{1000000000000} \approx 53{,}3.$$

So, for the index of economic security (ESI) of NATO we have the estimate

$$I_{ESI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6} - \frac{(E+I)}{10^{12}} - \frac{D}{10^{12}} =$$
$$= 147{,}9 + 9{,}7 + 25{,}7 - 19{,}7 - 53{,}3 = 110{,}3.$$

The index of political security is

$$I_{PSI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6} + \frac{M}{10^6} +$$
$$+ \frac{H}{10^3} + \frac{1}{2}\left(\frac{S_1}{10^6} + \frac{S_2}{10^2}\right) + \frac{C}{10^3} =$$
$$= 147{,}9 + 9{,}7 + 25{,}7 + 3{,}39 + 4{,}223 +$$
$$+ \frac{1}{2}\left(\frac{6866245}{1000000} + \frac{2258}{100}\right) + \frac{22308}{1000} =$$
$$= 190{,}9 + 14{,}74 + 2{,}23 \approx 207{,}9.$$

Data are taken from different non-official sources in Internet and are approximate.

Security indeces of Russia

Here we estimate the indexes for Russia. Data are taken from Stoynov (2022).

The productivity and growth index for 2021 is

$$I_P = \frac{P_R + P_N}{2*10^{12}}(1+g) =$$
$$= \frac{1480000000000 + 41336084000000}{2*1000000000000} 1{,}047 =$$
$$= \frac{5{,}61}{2} * 1{,}047 \approx 2{,}924 \approx 2{,}9.$$

The population indexfor 2021 is

$$I_N = \frac{N}{10^8} = \frac{144000000}{100000000} = 1{,}44 \approx 1{,}5.$$

The index of territory and resources is:

$$I_A = \frac{A}{10^6} = 17{,}098 \approx 17{,}1.$$

The degree of openness o economy of Russia for 2021 is

$$O = \frac{(E+I)}{10^{12}} = \frac{547741272400 + 247161000000}{1000000000000} \approx 7{,}9,$$

The external indebtness of Russia for 2021 is

$$I_D = \frac{D}{10^{12}} = \frac{410280000000}{1000000000000} \approx 0{,}41.$$

So, for the inex of economic security (ESI) of Russia for 2020-2021 we have the estimate

$$I_{ESI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{N}{10^8} + \frac{A}{10^6} - \frac{(E+I)}{10^{12}} - \frac{D}{10^{12}} =$$
$$= 2{,}9 + 1{,}5 + 17{,}1 - 7{,}9 - 0{,}41 = 37{,}5 - 28{,}8 = 13{,}19.$$

The index of political security (PSI) of Russia is

$$I_{PSI} = \frac{P_R + P_N}{2*10^{12}}(1+g) + \frac{M}{10^6} + \frac{N}{10^8} + \frac{A}{10^6} +$$
$$+ \frac{H}{10^3} + \frac{1}{2}\left(\frac{S_1}{10^6} + \frac{S_2}{10^2}\right) + \frac{C}{10^3} =$$
$$= 2{,}9 + 1{,}5 + 17{,}1 + \frac{1014000}{1000000} + 6{,}3 +$$
$$+ \frac{1}{2}\left(\frac{845739}{10^6} + \frac{603}{10^2}\right) + 3{,}9 =$$
$$= 21{,}5 + 1 + 6{,}3 + 0{,}7 + 3{,}9 = 33{,}4.$$

Comparing security indeces of NATO and Russia

The comparison between the indexes of economic security (ESI) and political security (PSI) of NATO and Russia is presented in Table 1.

Table 1. Approximate comparing security indeces of NATO and Russia

State/organization	ESI	PSI
NATO	110,3	207,9
Russia	13,19	33,4
NATO/Russia	8,4	6,2

The ESI of NATO is 8,4 times higher than that of Russia.

The PSI of NATO is 6,2 times higher than that of Russia.

So, we have considerable disproportion in security between NATO and Russia in Eastern Europe. In case of escalation, Russia would be exposed to high risk of economic and political defeat.

Conclusion

High security disproportion between NATO and Russia is reason for high risk and potential turbulence in political and economic life in Europe.

This risk should be mitigated by diplomatic channels.

Russia should also look for creating alliances with other countries to guarantee its security.

References

OEC World (2025) oec.world/en/profile/international_organization/north-atlantic-treaty-organization

Stoynov, P. (2022) Multipolarity in the contemporary world. Definitions of poles. Proceedingd of Twelfth International Conference "Globalization: business, finance and education"–GB-2022. Perun-Sprint. 2022. pp. 59-62.ISSN: 1314-4618.

WorldData (2025) www.worlddata.info/alliance/nato.php. Last seen: February, 2025.

World Economics (2025) www.worldeconomics.com/Regions/NATO/?Section=Economics#ECONOMYSIZE. Last seen: February, 2025.

World Economics (2025a) www.worldeconomics.com/Regions/NATO/?Section=Economics#ECONOMICGROWTH