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From Carrier to Civilizational Connector: Designing the Civilizational Airline as a KPI-Governed Model for Cultural Diplomacy, Route Strategy, and Public Value

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Abstract

Airlines are usually assessed through operational, financial, safety and customer-experience indicators such as load factor, yield, CASK, RASK, on-time performance, completion factor, ancillary revenue and passenger satisfaction. These metrics remain indispensable, but they do not fully capture the wider role of strategically positioned airlines as connectors of cultures, diasporas, destinations, trade corridors, pilgrimage flows, education mobility, health tourism and national image. This article develops the concept of the Civilizational Airline: an airline that functions not only as a commercial carrier but also as a civilizational connector governed through disciplined route strategy, cultural diplomacy, public value and accountable performance management. Methodologically, the study adopts a design-science research logic supported by an integrative literature review and selective use of prior author-developed KPI-governance frameworks as design precedents rather than empirical proof. The resulting artifact, the Civilizational Airline 360 Framework, comprises seven interdependent domains: cultural experience architecture, civilizational route-network strategy, airport-gateway experience, brand and soft-power language, diaspora and trust capital, digital-data intelligence, and sustainability-accountability. The article contributes to airline strategy, aviation management, tourism policy, public diplomacy and performance governance by showing how civilizational value can be translated into auditable KPIs without replacing safety, profitability or operational discipline. The central proposition is that future airline competitiveness will increasingly depend not only on aircraft, slots and route expansion, but also on trusted connectivity, cultural intelligence, digital integration, environmental legitimacy and measurable contribution to public value.

Key words: Civilizational Airline; aviation diplomacy; airline KPIs; route strategy; public value; cultural diplomacy; airline governance; tourism enablement.

1. Introduction

1.1 Background and problem

Air transport is one of the most consequential infrastructures of contemporary globalization. It moves passengers and cargo, but it also enables tourism, trade, migration, international education, health mobility, humanitarian access, business exchange and the circulation of ideas. Industry evidence consistently frames aviation as more than a transport sector. IATA's value-of-air-transport work assesses aviation through GDP contribution, employment, connectivity, affordability, productivity, investment and trade enablement, while Aviation: Benefits Beyond Borders presents aviation as a source of economic and social development across national and regional systems [1, 2]. UN Tourism similarly links international tourism recovery to air connectivity and visa facilitation [3].

Despite this broad enabling role, airline strategy remains dominated by a comparatively narrow operating language: route profitability, yield, load factor, RASK, CASK, OTP, fleet utilization, safety compliance, punctuality, revenue management and customer satisfaction [4]. These metrics are necessary and should not be weakened. The problem is that they do not fully explain the strategic role of airlines that act as national gateways, cultural ambassadors, tourism accelerators, diaspora connectors, service-export enablers and public-diplomacy platforms. In such cases, the airline is not merely a transportation company. It is a visible, repeated and experiential interface between a country, a destination, a culture and the travelling public.

The proposed concept of the Civilizational Airline responds to this gap. A Civilizational Airline is not an airline that sacrifices commercial discipline for symbolism. It is an airline that treats culture, trust, route connectivity, hospitality, diaspora engagement, destination image, digital personalization and environmental responsibility as strategic assets governed through measurable performance architecture. The concept is particularly relevant to flag carriers, network airlines, hybrid national carriers, tourism-oriented airlines and carriers whose route networks intersect with public diplomacy, cultural heritage, religious mobility, health tourism, international education and national development.

1.2 Problem statement

Airline strategy is commonly designed around commercial viability and operational resilience. Routes are typically assessed by traffic demand, yield, load factor, network contribution, competitive intensity, airport charges, fleet economics, slot access and regulatory constraints. This approach is rational, but incomplete. Some routes generate value beyond direct route profit: they may strengthen inbound tourism, support diaspora relations, enable pilgrimage, increase educational mobility, improve medical-travel access, deepen trade corridors, enhance destination image and increase cultural familiarity. Conversely, some highly visible routes may generate reputational or environmental costs that are not visible in route-level financial dashboards.

The managerial problem is therefore not that existing airline KPIs are wrong; it is that they are insufficient for airlines that operate as strategic public-value infrastructures. Existing aviation economics recognizes aviation's contribution to tourism and trade, service-quality literature explains passenger satisfaction and loyalty, and public-diplomacy literature recognizes airlines as soft-power instruments. Yet these streams are rarely integrated into airline-level KPI governance that boards, CEOs, tourism ministries, airport authorities, civil aviation regulators and national investment agencies can use for disciplined decision-making. The absence of such an integrated architecture creates three risks: civilizational value is asserted but not measured; symbolic routes are maintained without disciplined review; and public-value claims are separated from safety, financial and sustainability constraints.

1.3 Research questions and objectives

The primary research question is: How can an airline be conceptualized, designed and governed as a Civilizational Airline that creates measurable cultural, economic, diplomatic and public-value outcomes while preserving commercial discipline?

The study is guided by four secondary research questions:

1. What distinguishes a Civilizational Airline from a conventional commercial carrier?
2. Which strategic domains should be included in a civilizational airline framework?
3. Which KPIs can measure civilizational contribution without replacing safety, financial and operational KPIs?
4. How can airline executives, policymakers, airport authorities, tourism bodies and public-diplomacy institutions use this model for strategy, governance and performance management?

Accordingly, the article has four objectives: to define the Civilizational Airline concept; to construct a multi-domain governance framework; to propose a KPI architecture integrating financial, operational, cultural, tourism, diaspora and sustainability metrics; and to clarify implementation implications for airline boards and public-value stakeholders.

1.4 Contribution and scope

The article contributes to five conversations. First, it extends airline strategic management by treating route networks as economic and civilizational maps rather than only revenue maps. Second, it advances aviation KPI architecture by adding governable non-financial indicators such as cultural trust, diaspora engagement, destination image lift, multilingual accessibility, gateway quality and public-diplomacy value. Third, it contributes to tourism and service-export strategy by positioning airlines as active instruments of inbound tourism, medical tourism, pilgrimage tourism, education mobility and destination development. Fourth, it contributes to public diplomacy and soft-power theory by conceptualizing the airline as an everyday, human-facing diplomatic platform. Fifth, it extends civilizational and public-value governance by proposing a disciplined way to measure trust, cultural encounter and route-enabled public value without reducing them to propaganda or treating them as substitutes for safety and profitability.

The scope is intentionally bounded. The article focuses on passenger airlines, especially strategically positioned national, flag, network, hybrid and tourism-oriented carriers. Cargo-only airlines, ultra-low-cost carriers and purely point-to-point operators may adopt selected domains, but they are not the primary design context. The article is conceptual and design-science oriented. It does not claim empirical validation of the framework, causal effects on tourism or confirmed passenger-level outcomes. Those claims require future Delphi validation, passenger surveys, route-level econometrics, case studies and dashboard prototyping.

2. Literature Review

2.1 Aviation connectivity, route strategy and public value

Aviation connectivity is widely associated with economic development, productivity, investment and trade. IATA's value-of-air-transport reports assess aviation's direct and indirect contributions through GDP, employment, connectivity and affordability indicators [2]. ATAG's Aviation: Benefits Beyond Borders places aviation within a broader economic and social-development architecture, including tourism, employment, trade and access for remote communities [1]. IATA's more recent connectivity analysis also emphasizes that

airline networks evolve with passenger demand, trade flows, economic activity and regulatory frameworks [5].

Route networks are therefore more than operational patterns. They are spatial expressions of airline strategy, state connectivity, tourism access and market reach. Airline network literature has traditionally examined hub-and-spoke structures, point-to-point systems, full-service versus low-cost network design, airport centrality, competitive density and traffic distribution [6]. This article builds on that work but adds a public-value layer. The relevant question is not only whether a route is profitable, but whether it is strategically meaningful when evaluated through carbon-adjusted public value, tourism enablement, diaspora connectivity, cultural proximity, trade/service-export flows, educational mobility and reputational legitimacy.

Public-value theory is useful here because it asks how institutions create value beyond private financial returns. Moore [7] frames public value as a strategic management problem, while Mazzucato [8] argues that mission-oriented systems require coordinated public-private capacity and measurable outcomes. Applied to aviation, public value does not mean that airlines become extensions of the state or abandon commercial discipline. It means that when an airline is strategically embedded in national development, tourism, cultural diplomacy or regional connectivity, boards and policymakers need a governance language that can specify, measure and audit those broader contributions.

2.2 Aviation diplomacy, soft power and national image

Soft power and public diplomacy provide the wider conceptual vocabulary for understanding how attraction, national image and international communication operate in non-coercive settings [9, 10]. The literature on aviation diplomacy provides the most direct foundation for the Civilizational Airline concept. Kobierecki [11] conceptualizes aviation diplomacy through a tripartite framework: civil aviation can function as a foreign-policy tool, as a means of shaping national image and as a space in which aviation actors themselves become diplomatic actors. This tripartite logic is central to the present article because it allows airlines to be studied not merely as firms, but as mobility institutions that can influence perception, cooperation and international relations.

Recent work on Qatar Airways extends this argument. Aras and Duman [12] examine Qatar Airways in the South Caucasus and define aviation diplomacy as diplomatic processes and structures within civil aviation, emphasizing the role of a carrier as foreign-policy tool, national-image asset and autonomous business-diplomacy actor. Their later study of Qatar Airways in the Balkans similarly positions the airline within soft-power and business-diplomacy processes [13]. These studies are valuable because they show that airline networks, sponsorships, route openings, humanitarian activity and business diplomacy may interact with foreign-policy and national-branding aims.

The Turkish Airlines literature provides another important precedent. Anaz and Akman [14] frame Turkish Airlines as a contributor to Turkey's image-making and public diplomacy, while Selçuk [15] analyzes Turkish Airlines as a soft-power source in Africa. The broader MENA flag-carrier literature also treats national airlines as tools of international projection, economic diversification and public diplomacy [16]. These studies support the argument that airlines can be carriers of soft power. However, much of this literature stops at interpretation. It often does not provide a KPI-governed operating model specifying what should be measured, who owns the indicators, how route decisions are reviewed, what data are used, and how risks such as propaganda, cultural tokenism and financial dilution are controlled.

2.3 Airline service experience, cultural encounter and the airport gateway

Airline service-quality research has long established links among service perception, customer value, satisfaction, airline image and behavioural intention. Park, Robertson and Wu [17] tested a model connecting service expectation, perception, value, satisfaction, airline image and behavioural intention in the airline context. Namukasa [18] similarly shows the relevance of pre-flight, in-flight and post-flight service quality to passenger satisfaction and loyalty. This literature is important because a Civilizational Airline is experienced materially through check-in, language, cabin crew behaviour, food, signage, lounge design, digital touchpoints, accessibility, disruption recovery and post-trip communication.

The present article extends service-quality logic by arguing that airline experience is also a cultural encounter. A passenger's impression of a country or destination may be shaped before arrival through language inclusiveness, hospitality scripts, cabin ambience, culinary authenticity, cultural information, digital content, service recovery and crew behaviour. This does not imply that airlines should impose a narrow identity narrative. Rather, airlines can design service experiences that are plural, respectful, accessible and culturally intelligent. This transforms service quality from a satisfaction metric into part of destination image and public-diplomacy architecture.

The airport adds a second gateway layer. Passengers experience airline and airport as a combined journey, especially when the airline uses a hub as a national gateway. A mismatch between airline brand promise and airport experience weakens the credibility of civilizational positioning. Therefore, a Civilizational Airline requires airport-airline coordination on wayfinding, language accessibility, queue experience, transfer experience, lounge quality, cultural content, retail curation, prayer/quiet spaces, accessibility, border coordination and disruption recovery. These are not symbolic details. They are points where cultural trust can either be built or damaged.

2.4 KPI governance, digital airline retailing and sustainability accountability

Performance governance literature is needed because the Civilizational Airline should not remain a slogan. Kaplan and Norton's Balanced Scorecard logic translates strategy into objectives, measures, targets and initiatives [19, 20]. Design-science research provides an appropriate methodological basis for constructing and evaluating artifacts intended to solve practical problems [21, 22]. The Civilizational Airline 360 Framework is therefore framed as a design artifact: it converts a strategic problem into domains, KPIs, governance routines, data flows and evaluation pathways.

Modern airline retailing also matters. IATA describes Modern Airline Retailing as a shift toward 100% Offers and Orders, supported by standards including NDC and ONE Order. NDC is a data-exchange format based on Offer and Order management processes that enables airlines to create and distribute relevant offers across channels, while ONE Order aims to consolidate multiple legacy records into a single customer-focused order [23, 24]. For the Civilizational Airline, this matters because cultural experience, diaspora engagement, pilgrimage mobility, education travel, health tourism and destination promotion cannot be governed only through brand campaigns. They require data architecture: PSS, DCS, CRM, loyalty, NDC/GDS, OAG schedules, AODB/airport data, tourism datasets, multilingual segmentation, consent management, AI governance, cybersecurity and data quality controls.

Sustainability is a legitimacy condition. ICAO's CORSIA is the first global market-based scheme applying to a sector and is intended to complement in-sector emission-reduction efforts such as technology, operations and sustainable aviation fuels [25]. IATA's Net Zero roadmaps identify aircraft technology, energy infrastructure, operations, finance and policy as critical pathways toward net zero CO2 by 2050 [26]. A Civilizational Airline cannot credibly

claim public value if it ignores emissions, SAF access, fleet efficiency, operational fuel burn, carbon disclosure or environmental justice. The framework must therefore ask not only "What value does this route create?" but also "What is the carbon-adjusted public value of this route, and how can the airline reduce the environmental burden of its connectivity mission?"

2.5 Positioning the author-developed corpus

The author's prior KPI-governance work is used selectively as design precedent, not as the principal scholarly proof. The relevant corpus includes UCTA-PA, which develops civilizational benchmarking through Crisis Warning Indicators and Strategic Progress Indicators; ICRA/MCPI, which introduces gate-constrained composite-index logic and data-quality/consent gates; DDRNIC, which translates civilizational objectives into a Balanced Scorecard and KPI dictionary; and selected airline KPI work on passenger experience, airport services, customer experience and digital modernization [27, 28, 29, 30, 31, 32, 33]. These works inform the architecture of KPI cards, governance cadence, composite-index design and data stewardship. They are not treated as evidence that the Civilizational Airline model has already been empirically validated.

2.6 Research gap

The literature provides strong building blocks but remains fragmented. Aviation economics explains connectivity, trade, employment and tourism effects, but often treats them as macroeconomic outcomes rather than airline-level governance variables. Airline service-quality research measures satisfaction and loyalty but rarely evaluates the cultural and diplomatic meaning embedded in service experience. Airport-experience research recognizes terminals as service environments but often remains disconnected from airline route and brand strategy. Soft-power literature recognizes national carriers as image-making instruments, but it usually lacks KPI architecture, board governance logic and route-level measurement. Modern airline retailing literature focuses on offers, orders, identity, personalization and payments, but does not yet sufficiently connect airline data architecture with tourism policy, diaspora strategy, cultural diplomacy and public trust. Sustainability literature provides carbon governance tools, but cultural-value frameworks often fail to integrate environmental accountability into the same decision architecture.

The specific gap addressed in this article is therefore the absence of a KPI-governed, design-science framework that conceptualizes, designs and governs an airline as a civilizational connector while preserving safety, profitability, operational resilience and sustainability discipline.

3. Methodology

3.1 Research design

This study uses a design-science research approach supported by integrative literature review. Design science is suitable because the objective is not to test a hypothesis about existing airline behaviour, but to design an artifact that addresses a managerial and governance problem: how to translate the civilizational role of airlines into measurable, auditable and governable strategy. The design artifact is the Civilizational Airline 360 Framework, accompanied by KPI architecture, route-value logic, governance routines, data-flow requirements and risk controls.

The study follows the design-science sequence proposed in information systems research: problem identification and motivation; definition of objectives for a solution; design and development of the artifact; demonstration through structured use cases and KPI examples; evaluation logic; and communication of the artifact to scholarly and practitioner audiences

[21, 22]. Because no new passenger, employee or confidential airline data were collected, the article's claims are conceptual and design-oriented. It does not report causal findings, statistical coefficients or validated empirical outcomes.

3.2 Source corpus and selection logic

The source corpus combined official aviation and tourism sources, peer-reviewed literature on air transport, tourism, service quality, aviation diplomacy, public value and design science, and selected prior author-developed KPI frameworks. The external literature provides the scholarly spine of the article. The author-developed works are used only as design lineage for KPI architecture and governance logic, not as empirical proof of the proposed Civilizational Airline model.

3.3 Artifact-development logic

The artifact was developed through four design moves. First, the civilizational role of an airline was decomposed into strategic functions: transport, gateway, cultural interface, tourism enabler, diaspora connector, public-diplomacy actor, digital-retailing platform and sustainability-responsible infrastructure. Second, these functions were mapped into seven governance domains. Third, each domain was translated into measurable objectives and sample KPIs. Fourth, the framework was embedded into a board-level governance model with data-quality gates, privacy controls, sustainability constraints and route-portfolio review cadence.

The design logic is explicitly non-substitutional. Civilizational KPIs do not replace safety, profitability, OTP, CASK, RASK, asset utilization, regulatory compliance or customer experience. They add an upper layer of public-value interpretation, subject to hard gates. A route or initiative cannot be treated as civilizationally successful if it fails basic safety, legality, data privacy, environmental accountability or financial discipline.

3.4 Evaluation logic and future validation

The present article evaluates the framework through conceptual coherence, literature fit, KPI traceability, managerial usability and risk-control completeness. Future empirical evaluation should use: Delphi panels with airline executives, tourism policymakers, airport leaders and public-diplomacy experts; comparative case studies of carriers such as Emirates, Qatar Airways, Turkish Airlines, Singapore Airlines and Ethiopian Airlines; passenger surveys measuring cultural trust, destination image and perceived authenticity; route-level econometric analysis linking connectivity with tourism, trade, diaspora, education and service exports; and dashboard prototypes integrating airline, airport, CRM, tourism, sustainability and public-value data.

4. Results: The Civilizational Airline 360 Framework

4.1 Definition of the Civilizational Airline

A Civilizational Airline is a strategically governed airline that connects people, places, cultures and economies through safe, commercially disciplined and environmentally accountable air transport, while intentionally contributing to cultural diplomacy, destination image, diaspora trust, tourism enablement, service-export development and public value. It is not defined by state ownership, aircraft size, luxury positioning or national symbolism alone. It is defined by the integration of commercial aviation capability with accountable civilizational value creation.

The definition has four boundary conditions. First, safety and regulatory compliance are non-negotiable. Second, civilizational value must be measured and audited, not merely narrated.

Third, cultural representation must be plural, respectful and non-coercive. Fourth, public-value routes and services must remain subject to financial, environmental and strategic review.

Table 1. From conventional carrier logic to civilizational connector logic

Dimension	Conventional carrier emphasis	Civilizational connector extension
Core role	Transport passengers and cargo safely and profitably	Connect cultures, diasporas, destinations, economies and public-value missions through disciplined aviation capability
Route logic	Demand, yield, load factor, network contribution, slot and fleet economics	Commercial viability plus tourism enablement, diaspora connectivity, education/health/pilgrimage corridors, trade/service exports and carbon-adjusted public value
Service logic	Customer satisfaction, NPS, punctuality, complaint reduction	Hospitality as cultural encounter; multilingual accessibility; authentic but inclusive destination representation
Brand logic	Market positioning and loyalty differentiation	Experiential soft-power language and national/destination image governance
Data logic	Revenue management, loyalty, CRM, disruption recovery and operational control	Ethical cultural intelligence, consent-based segmentation, tourism/diaspora analytics and public-value dashboards
Governance logic	Executive KPIs, route committees and commercial reviews	Board-level civilizational-value review with safety, privacy, data-quality, sustainability and financial gates
Risk logic	Operational, safety, commercial and reputational risk	Plus propaganda risk, tokenism, exclusion, measurement gaming, privacy misuse and carbon-legitimacy risk

4.2 Seven domains of the Civilizational Airline 360 Framework

The framework contains seven interdependent domains. None is sufficient alone. A carrier may have strong cultural branding but weak data governance, strong network reach but poor airport gateway experience, or strong tourism alignment but weak sustainability accountability. The framework is therefore designed as a system rather than a list of isolated initiatives.

Figure 1. Civilizational Airline 360 Framework: domains and non-negotiable governance controls.

Table 2. Civilizational Airline 360 domains and governance purpose

Domain	Strategic purpose	Core decision question
1. Cultural experience architecture	Design the passenger journey as a respectful and authentic cultural encounter	Does the passenger experience build cultural trust without tokenism or exclusion?
2. Civilizational route-network strategy	Evaluate routes as commercial, tourism, diaspora, trade, education, health and pilgrimage corridors	Which routes create disciplined public value beyond direct route profit?
3. Airport gateway and ground experience	Align airline and airport experience as one national/destination gateway	Does the gateway experience reinforce or damage the airline's civilizational promise?
4. Brand as soft-power language	Translate national/destination image into credible, non-propagandistic brand experience	Is the airline brand perceived as trustworthy, welcoming and culturally intelligent?
5. Diaspora, memory and trust capital	Use connectivity to maintain diaspora ties, heritage routes and community trust	How does the airline serve communities with historical, family, business or faith-based ties?
6. Digital and data-driven civilizational intelligence	Integrate PSS/DCS/CRM/NDC/OAG/AODB/tourism and sustainability data with privacy and data-quality controls	Can the airline measure and personalize civilizational value ethically and accurately?
7. Sustainability and accountability	Ensure environmental legitimacy and public accountability	Is connectivity value carbon-aware, transparently governed and compatible with long-term sustainability?

4.3 Domain 1: Cultural experience architecture

Cultural experience architecture concerns how the airline expresses hospitality, language, food, visual identity, accessibility, crew interaction, disruption recovery and digital content. This domain is not decorative. Airline service is often the first and last direct experience of a country or destination. A poorly handled disruption, inaccessible language environment or culturally insensitive service failure can damage trust more than a formal diplomatic campaign can repair. Conversely, respectful multilingual service, authentic meal design, inclusive cabin communication, destination storytelling and dignified recovery can strengthen destination image and passenger memory.

The key governance risk is tokenism. Culture must not be reduced to costume, slogans, music or menu items. The domain requires expert input, passenger feedback, diaspora consultation, accessibility standards and clear service-design ownership. KPIs should measure cultural trust, language accessibility, complaint patterns, inclusive service quality, authenticity perception and service-recovery dignity.

4.4 Domain 2: Civilizational route-network strategy

Civilizational route-network strategy extends conventional route planning. It preserves commercial discipline but adds structured public-value variables. These may include inbound tourism potential, diaspora density, pilgrimage demand, historical/cultural ties, education mobility, health tourism, trade corridors, service-export flows, geopolitical sensitivity, destination-development priorities, airport-gateway readiness and carbon-adjusted impact. The point is not to justify unprofitable symbolic routes indefinitely. The point is to make the non-financial value of routes explicit and reviewable.

The proposed Civilizational Route Value Score (CRVS) can support portfolio review. For route r, CRVS may be expressed as: CRVS_r = w1 commercial viability + w2 tourism enablement + w3 diaspora/heritage connectivity + w4 education/health/pilgrimage corridor value + w5 trade/service-export enablement + w6 public-diplomacy value + w7 gateway readiness - w8 carbon burden - w9 operational-risk penalty. The weights should be approved by the board or strategy committee and constrained by safety, legal, environmental and financial gates. The formula is illustrative and must be calibrated to context before use.

4.5 Domain 3: Airport gateway and ground experience

The airline does not control the whole passenger journey, but passengers rarely separate airline, airport, immigration, baggage, lounge, transfer and ground-transport experience when forming destination impressions. For hub carriers and national gateways, the airport is part of the civilizational product. Gateway KPIs should therefore be shared across airline, airport authority, ground handler, immigration, customs, tourism board and service partners where governance permits.

Relevant metrics include transfer ease, queue experience, baggage reliability, multilingual wayfinding, accessibility, prayer/quiet-space quality, family-service support, cultural information quality, lounge cultural authenticity, retail/destination curation and disruption coordination. This domain requires a cross-institutional governance forum because no single airline executive owns the complete gateway experience.

4.6 Domain 4: Brand as soft-power language

The brand domain treats the airline as an experiential language of soft power. Unlike formal diplomacy, the airline communicates through repeated operational encounters: aircraft livery, safety videos, cabin service, crew training, sponsorships, digital content, destination campaigns, disruption handling and humanitarian responses. The scholarly literature on

aviation diplomacy and flag carriers shows that airlines can shape national image and international perception [11-14].

However, the soft-power function must be governed ethically. A Civilizational Airline should not become a propaganda platform. The brand should express hospitality, competence, trust and cultural openness rather than coercive ideology. Governance should include reputational risk review, stakeholder sentiment, cultural-advisory input, crisis-communication protocols and clear boundaries between destination promotion and political messaging.

4.7 Domain 5: Diaspora, memory and trust capital

Diaspora routes are not only traffic flows. They sustain family ties, heritage memory, remittances, entrepreneurship, education, cultural continuity and crisis mobility. For many communities, the airline is an infrastructure of belonging. This domain asks how the airline serves diaspora communities through route planning, fare products, multilingual service, festival/holiday capacity, baggage policies, digital communication, family support, disruption recovery and community partnerships.

Trust capital is fragile. If diaspora data are used without consent, if pricing is perceived as exploitative during peak heritage periods, or if service quality differs across communities, the airline can damage the very trust it seeks to build. KPIs should therefore include diaspora engagement, heritage-route reliability, community sentiment, consented segmentation coverage, complaint equity, family-service satisfaction and crisis-mobility readiness.

4.8 Domain 6: Digital and data-driven civilizational intelligence

A Civilizational Airline requires a data architecture capable of linking operational, commercial, customer, route, tourism, diaspora and sustainability evidence. Core internal sources include PSS, DCS, CRM, loyalty, revenue management, revenue accounting, NDC/GDS, OCC, MRO, ERP, crew systems and finance/BI platforms. External sources may include OAG schedules, airport AODB data, tourism-board data, visa facilitation data, hotel/RevPAR indicators, event calendars, education and medical-travel indicators, diaspora statistics, social listening and sustainability datasets.

This domain is governance-sensitive. Cultural and diaspora segmentation can be useful only if consent, purpose limitation, privacy, cybersecurity, data quality and fairness controls are strong. The framework therefore requires a Data Quality Index, Consent and Privacy Compliance gate, lineage coverage, role-based access, model cards for AI-enabled personalization, bias testing and dashboard auditability. “No data, no decision” is insufficient; the stronger rule is “No trusted and lawful data, no civilizational-value claim.”

4.9 Domain 7: Sustainability and accountability

Civilizational connectivity without sustainability becomes morally and strategically weak. Aviation faces intense scrutiny because the social value of connectivity must be reconciled with climate impact. The sustainability domain therefore integrates carbon intensity, fuel efficiency, SAF strategy, CORSIA compliance, fleet renewal, operational efficiency, contrail and non-CO2 awareness where applicable, waste reduction, circularity and transparent disclosure. It also requires routes and public-value initiatives to be assessed through carbon-adjusted value logic.

The governance principle is clear: public value cannot be claimed while environmental cost is hidden. Civilizational value must be reported together with emissions, mitigation actions and credible decarbonization constraints. This avoids the contradiction of presenting aviation as a public good while ignoring its environmental burden.

4.10 KPI architecture and the Civilizational Connector Value Index

The Civilizational Connector Value Index (CCVI) is proposed as a composite executive indicator that summarizes civilizational airline performance across the seven domains. It is not intended to replace operational and financial dashboards. It is a board-level interpretation layer that allows executives to see whether the airline's wider public-value mission is being delivered credibly.

CCVI should be computed only when hard gates are passed: safety/regulatory compliance, data-quality threshold, privacy/consent compliance, financial discipline and sustainability reporting. If any gate fails, CCVI should either be withheld or capped. This non-compensatory design prevents strong brand or tourism performance from masking weak safety, privacy, data or sustainability performance.

Table 3. Illustrative KPI architecture for the Civilizational Airline

Domain	Illustrative KPIs	Primary data sources	Governance owner
Cultural experience architecture	Cultural Trust Score; Multilingual Accessibility Index; Cultural Service Recovery Score; Authenticity Perception Index	NPS/CSAT, complaints, post-flight surveys, CRM, cabin audit	Chief Customer Experience Officer
Civilizational route-network strategy	Civilizational Route Value Score; Tourism Enablement Yield; Diaspora Connectivity Index; Service Export Corridor Score	PSS, OAG, revenue management, tourism board, visa and trade data	Chief Strategy/Commercial Officer
Airport gateway and ground experience	Gateway Experience Alignment Score; Transfer Ease Index; Baggage Reliability; Multilingual Wayfinding Score	AODB, DCS, baggage systems, airport surveys, SLA reports	Airport-airline joint committee
Brand and soft-power language	Destination Image Lift; Soft-Power Sentiment Index; Trustworthy Brand Perception; Sponsorship Public-Value Fit	Brand tracker, social listening, media analysis, market research	Chief Brand/Marketing Officer
Diaspora, memory and trust capital	Diaspora Engagement Index; Heritage Route Reliability; Family Travel Support Score; Community Sentiment Index	CRM, loyalty, diaspora surveys, route data, community feedback	Commercial/diaspora partnership lead
Digital and data-driven intelligence	Data Quality Index; Consent and Privacy Compliance; Lineage Coverage; Ethical Personalization Score	Data catalog, MDM, privacy logs, model cards, BI platform	Chief Digital/Data Officer
Sustainability and accountability	CO2/RPK; SAF Uptake; Carbon-Adjusted Public Value; CORSIA Compliance Readiness; Fuel Efficiency Improvement	Fuel systems, fleet data, sustainability reports, regulatory filings	Chief Sustainability/Operations Officer

A simplified CCVI structure is: $CCVI = \Sigma(wd \times Sd)$, where Sd is the normalized score for domain d and wd is the approved weight. No domain should dominate the index; weight caps and minimum floors should be used. A suggested design is to cap each domain weight at 20 percent and require a floor of 50/100 for each strategic domain, with non-negotiable gates for safety, legality, privacy and sustainability disclosure. The index should be reported with component scores, not as a single opaque number.

5. Governance and Implementation Model

5.1 Board-level operating model

Civilizational-airline governance requires board visibility because it cuts across commercial strategy, customer experience, brand, digital, operations, sustainability, risk, public affairs and external stakeholders. The recommended structure is a Civilizational Value and Connectivity Committee or an equivalent mandate inside the strategy/risk committee. Its role is not to politicize airline management. Its role is to govern public-value claims, route-value trade-offs, cultural representation, data ethics, sustainability legitimacy and stakeholder coordination.

The committee should review quarterly CCVI performance, annual route-portfolio public-value analysis, major route openings/closures with civilizational implications, cultural-experience audits, diaspora engagement reports, sustainability-gate exceptions, privacy and data-quality breaches, and reputational risk. It should also ensure that civilizational-value initiatives are linked to budget, owners, milestones and measurable outcomes.

Table 4. Executive governance responsibilities

Role	Civilizational-airline responsibility	Decision rights
Board / Strategy-Risk Committee	Approve mission boundary, gates, CCVI design, major route-value trade-offs and public-value risk appetite	Approve / challenge / require corrective action
CEO	Integrate civilizational value with commercial strategy and operational discipline	Set enterprise priorities and accountability cadence
Chief Commercial Officer	Embed CRVS into route portfolio, pricing, partnerships and tourism alignment	Route and revenue strategy decisions subject to gates
Chief Customer Experience Officer	Design cultural experience, service recovery and gateway standards	Journey standards and CX investment priorities
Chief Digital/Data Officer	Ensure trusted data, consent, lineage, MDM, AI governance and dashboard auditability	Data architecture, privacy-by-design, model governance
Chief Sustainability/Operations Officer	Integrate carbon-adjusted value, fuel efficiency, CORSIA and SAF strategy	Operational and environmental performance controls
Tourism / public diplomacy partners	Provide destination, heritage, event, diaspora and cultural expertise	Advisory and co-investment roles, not operational command

5.2 RACI logic for implementation

The implementation model should distinguish accountability from consultation. Airlines often fail in cross-functional initiatives because everything becomes everyone's responsibility. A RACI-based model reduces ambiguity. The board is accountable for strategic boundaries; the CEO is accountable for enterprise integration; commercial leadership is accountable for route-value discipline; customer-experience leadership is accountable for service and gateway design; digital/data leadership is accountable for trusted intelligence; sustainability leadership is accountable for environmental legitimacy; and external bodies are consulted or partnered where appropriate.

The implementation cadence should be practical: monthly operational KPI review, quarterly CCVI and route-portfolio review, semi-annual cultural-experience audit, annual sustainability-public-value review, and periodic independent advisory review. The cadence should be synchronized with budget cycles, fleet planning, tourism campaigns, airport-development plans and regulatory reporting.

5.3 Data architecture

The data architecture should connect three layers. The first layer is operational and commercial: PSS, DCS, CRM, loyalty, revenue management, revenue accounting, OCC, MRO, ERP, finance/BI and NDC/GDS distribution. The second layer is ecosystem data: OAG schedules, airport AODB, tourism demand, hotel indicators, visa facilitation, event calendars, education and medical-travel demand, diaspora statistics and public sentiment. The third layer is governance data: data-quality scores, consent status, lineage, access logs, privacy incidents, model-card records, sustainability disclosures and KPI ownership.

The architecture should be implemented through a governed BI layer, not through unmanaged spreadsheets. Each KPI requires a KPI card containing definition, formula, owner, data source, frequency, target, threshold, escalation rule, limitations and audit trail. This is essential because the credibility of civilizational-value reporting depends on the reliability of the measurement system.

5.4 Route-portfolio decision workflow

A route-portfolio workflow should include five steps. First, conventional route economics: demand, yield, cost, schedule, fleet, slots, airport charges and competitive position. Second, public-value mapping: tourism, diaspora, education, health, pilgrimage, trade, service export, cultural heritage and diplomatic relevance. Third, gateway readiness: airport experience, immigration/border coordination, ground handling, lounge, language and tourism integration. Fourth, sustainability assessment: emissions, aircraft type, fuel burn, SAF access, offset requirements and carbon-adjusted value. Fifth, governance decision: approve, pilot, subsidize transparently, partner with tourism/public bodies, redesign, suspend or exit.

This workflow is designed to prevent two opposite failures. The first is under-recognition, where high public-value routes are rejected because direct route profitability is the only lens. The second is over-symbolization, where routes are maintained indefinitely because they "look strategic" even when performance, emissions, opportunity cost and governance evidence are weak. Civilizational strategy requires discipline in both directions.

5.5 Risk controls

The Civilizational Airline model creates value only if risks are explicitly governed. The principal risks are cultural tokenism, propaganda, exclusion, financial dilution, sustainability contradiction, data privacy misuse, biased personalization, route-subsidy opacity, measurement gaming and reputational overclaim. These risks are not peripheral; they are central to whether the model is credible.

Table 5. Civilizational-airline risk register

Risk	Failure mode	Control mechanism	Early warning indicator
Cultural tokenism	Culture reduced to costume, slogans or superficial food cues	Cultural advisory review, passenger testing, diaspora consultation	High authenticity complaints; low Cultural Trust Score
Propaganda risk	Brand becomes political messaging rather than hospitality and trust	Brand ethics boundary, independent review, crisis-communication protocol	Negative soft-power sentiment; media backlash
Exclusion risk	One identity narrative marginalizes other communities	Plurality criteria, inclusion review, multilingual accessibility	Complaint concentration by language/community

Financial dilution	Symbolic routes maintained without disciplined review	CRVS plus route P&L, sunset clauses, transparent subsidy logic	Persistent route losses without approved public-value rationale
Sustainability contradiction	Public-value claims ignore emissions burden	Carbon-adjusted public value, SAF/fleet plan, CORSIA reporting	Rising CO2/RPK without mitigation plan
Data privacy misuse	Diaspora/cultural data used without consent or purpose limitation	Consent gate, privacy impact assessment, RBAC, audit logs	Consent breach; unresolved privacy incidents
Measurement gaming	Inflated civilizational KPIs without real passenger/destination impact	KPI cards, audit trail, independent validation, triangulation	Indicator improvement without corroborating outcome movement

6. Discussion

6.1 Theoretical implications

The article advances theory in four ways. First, it introduces the airline as a civilizational connector, bridging airline strategy, aviation diplomacy, tourism policy, service experience and public-value governance. Second, it extends public-value logic into airline performance management by showing how public value can be operationalized without replacing commercial discipline. Third, it reframes route networks as civilizational maps: routes are not only revenue channels but also infrastructures of memory, diaspora, education, trade, tourism and trust. Fourth, it extends soft-power literature by translating airline soft power into KPIs, governance routines and risk controls rather than treating it as a descriptive label.

The model also contributes methodologically by applying design-science reasoning to aviation strategy. Rather than merely describing existing airlines, it constructs an artifact that can be evaluated and iteratively improved. This is useful for top-tier journal scholarship because it converts a broad interdisciplinary idea into a researchable architecture with definable constructs, indicators, boundaries and future validation paths.

6.2 Managerial implications

For airline CEOs, the framework clarifies how to integrate public-value strategy with safety, profitability and operational execution. For chief commercial officers, it shows how route decisions can incorporate tourism, diaspora, education, health, pilgrimage and service-export variables without abandoning route economics. For chief customer experience officers, it positions cabin, lounge, ground, digital, food, language and recovery design as cultural-trust mechanisms. For chief digital officers, it requires CRM, NDC, loyalty, personalization and AI to be governed through ethical cultural intelligence. For sustainability leaders, it anchors public value to emissions transparency and mitigation. For tourism ministries and airport authorities, it creates a shared governance language for aligning airline networks with destination strategy.

The most important managerial implication is that civilizational value must enter the management system. If it remains in speeches, brand campaigns or strategy decks, it will be vulnerable to overclaim and under-delivery. If it is translated into KPI cards, route reviews, data flows, board cadence, budget ownership and risk controls, it can become a disciplined strategic capability.

6.3 Policy implications

For policymakers, the Civilizational Airline framework offers an alternative to two weak policy positions. One weak position is to treat airlines only as private firms and ignore their enabling role in tourism, diaspora, education, health mobility and national image. The other is

to treat airlines as symbolic national assets and protect them from commercial accountability. The proposed model provides a middle path: public-value objectives can be specified, measured and co-funded transparently, while safety, financial performance, data governance and environmental responsibility remain hard constraints.

This has implications for air-service agreements, tourism promotion, route-development funds, pilgrimage planning, health-tourism strategy, airport investment, crisis mobility and destination branding. Public co-investment in routes or campaigns should be tied to measurable outcomes, time-bound review and disclosure of public-value logic. This avoids both invisible subsidy and purely short-term commercialism.

6.4 Why the model should not be reduced to branding

A central risk is that the Civilizational Airline concept may be misunderstood as branding. Branding is only one domain. The model is stronger when it is treated as an operating system: route portfolio, service design, airport coordination, diaspora engagement, digital intelligence, sustainability governance and risk control. A carrier with impressive cultural branding but weak OTP, high complaint rates, poor privacy governance or rising unmanaged emissions is not a Civilizational Airline. Likewise, an efficient carrier with no cultural intelligence, no gateway coherence and no public-value accountability may be commercially strong but civilizationally underdeveloped.

7. Limitations and Future Research

The article has five limitations. First, it is conceptual and design-science oriented. It does not provide empirical validation of the proposed domains or KPIs. Second, the model is most applicable to strategically positioned carriers and may not fit all low-cost, cargo-only or purely point-to-point airlines. Third, the framework requires data integration that many airlines, airports and tourism bodies may not yet possess. Fourth, public-value indicators are vulnerable to measurement bias, stakeholder contestation and political misuse if governance is weak. Fifth, sustainability constraints may limit or reshape some civilizational-route ambitions.

Future research should proceed in six directions. First, Delphi validation should test domain relevance, KPI definitions and weight structures with airline executives, tourism policymakers, public-diplomacy experts, airport leaders and passenger representatives. Second, comparative case studies should examine airlines often associated with soft power and national image, such as Emirates, Qatar Airways, Turkish Airlines, Singapore Airlines and Ethiopian Airlines. Third, passenger surveys should measure cultural trust, destination image, perceived authenticity and gateway experience. Fourth, econometric studies should test links between route openings, connectivity, tourism flows, trade/service exports, education mobility and diaspora engagement. Fifth, sustainability research should test carbon-adjusted public value at route level. Sixth, dashboard prototypes should connect PSS, DCS, CRM, OAG, AODB, tourism, sustainability and sentiment data into auditable decision-support tools.

8. Conclusion

This article developed the concept of the Civilizational Airline as a KPI-governed model for airlines that function not only as carriers but as connectors of cultures, destinations, economies, diasporas, tourism flows, educational and health mobility, historical routes and public trust. The article argued that conventional airline KPIs remain necessary but

insufficient when airlines operate as strategic public-value infrastructures. Safety, profitability, punctuality, cost discipline, customer satisfaction and sustainability are still essential. The proposed contribution is to add a governable civilizational layer rather than replace the operational core.

The Civilizational Airline 360 Framework identifies seven domains: cultural experience architecture, civilizational route-network strategy, airport gateway and ground experience, brand as soft-power language, diaspora and trust capital, digital and data-driven civilizational intelligence, and sustainability-accountability. The CCVI and CRVS concepts translate these domains into measurable governance tools, while hard gates for safety, privacy, data quality, financial discipline and sustainability prevent overclaim. The model therefore offers a disciplined architecture for airline executives and policymakers who need to connect route strategy, cultural diplomacy, tourism enablement and public value without weakening commercial accountability.

The future airline will not compete through aircraft, slots and network reach alone. It will also compete through trusted connectivity, cultural intelligence, resilient data architecture, dignified service, credible sustainability and measurable contribution to public value. The Civilizational Airline is not a slogan for symbolic aviation. It is a governance model for airlines that understand connectivity as a strategic, cultural and public-value responsibility.

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