MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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Faculty of Management and Business
Department of International Economic Relations, Business & Management

Bachelor's Qualification Work

Planning as a general management function
based on experience in "Uni travel" company case

Bachelor student of the 4th year of study

Field of Study 07 – Management   **Yaryna Dobrianska**
and Administration

Specialty 073 – Management

Educ. program – Management

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                                       Ph.D. in Economics

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Abstract

Economic planning is vital for tourism companies to manage resources efficiently, control costs, and maximize profitability in a highly competitive and volatile industry. This bachelor's thesis explores theoretical approaches to tourism planning and conducts a case study analysis of the small travel agency Uni Travel based in Rivne, Ukraine. The literature review synthesizes quantitative forecasting models, optimization techniques, financial planning methods, and qualitative practices like scenario planning that are used for economic planning in tourism research. It highlights recommendations to blend statistical projections with expert judgement for effective planning. An in-depth examination of Uni Travel's practices reveals optimistic biases, data limitations, and lack of statistical rigor undermining the accuracy of its demand forecasting and budgeting effectiveness. Quantitative analysis confirms Mean Absolute Percentage Errors of 9.13% in demand projections. To address these deficiencies, the thesis proposes a way for Uni Travel to enhance analytical capabilities through investments in technologies (such as TOPO software), expanding data sources, building staff expertise, and applying advanced techniques, like exponential smoothing, correlation analysis, and scenario simulations. Cost-benefit evaluations justify $30,000-50,000 startup expenditures for potential $100,000+ long-term profit gains. The research concludes that improving tourism planning requires developing data-driven decision-making that combines human expertise with cutting-edge quantitative methods. Despite challenges, even small firms can embrace analytics for sustainable growth in the complex tourism sector.

Keywords: tourism planning, economic planning, Ukrainian tourism, quantitative methods, quantitative analysis, case study, sustainable growth, demand forecasting, data-driven decision-making

Анотація

Економічне планування є дуже важливим для туристичних компаній для ефективного розподілу ресурсів, контролю витрат та максимізації прибутковості у цій висококонкурентній та нестабільній галузі. Ця бакалаврська робота досліджує теоретичні підходи до туристичного планування та проводить аналіз кейсу невеликого туристичного агентства Uni Travel, що базується у Рівному, Україні. Огляд літератури включає кількісні моделі прогнозування, методи оптимізації, підходи до фінансового планування та якісні практики, такі як сценарне планування, що використовуються для економічного планування в туристичних дослідженнях. Цей огляд також включає рекомендації щодо поєднання статистичних прогнозів з експертними оцінками для ефективного планування. Глибокий аналіз практики Uni Travel показує, що в компанії є оптимістичні упередження, проблема обмежених даних, та брак статистичних методів, що знижує точність прогнозування

попиту та ефективність бюджетування. Кількісний аналіз підтверджує середні абсолютні відсоткові помилки 9,13% у прогнозах попиту. Для вирішення цих недоліків у роботі пропонується спосіб для Uni Travel покращити аналітичні можливості шляхом інвестицій у технології (наприклад, програмне забезпечення TOPO), розширення джерел даних, розвитку експертизи персоналу та застосування передових методів, таких як експоненціальне згладжування, кореляційний аналіз та імітаційне моделювання сценаріїв. Оцінки вартості та вигоди виправдовують стартові витрати від 30 000 до 50 000 доларів США для потенційного довгострокового збільшення прибутку понад 100 000 доларів. Дослідження робить висновок, що для покращення туристичного планування необхідно розвивати прийняття рішень на основі даних, яке поєднує людський експертний досвід з передовими кількісними методами. Незважаючи на обмежені ресурси, навіть невеликі фірми можуть використовувати аналітику для стабільного зростання у складній туристичній галузі.

Ключові слова: планування туризму, економічне планування, кількісні методи, кількісний аналіз, кейс-стаді, сталий розвиток, прогнозування попиту, прийняття рішень на основі даних

PHEE-institute «Ukrainian-American Concordia University»

Faculty of Management and Business
Department of International Economic Relations, Business and Management

Educational level   Bachelor degree
Specialty   073 "Management"
 Educational program "Management"

TASK
FOR BACHELOR'S QUALIFICATION WORK OF STUDENT

_____Yaryna Dobrianska_____
(Name, Surname)

1 . Topic of the bachelor's qualification work
_____"Planning as a General Management Function (on the basis of Uni
Travel)"_____

Supervisor of the bachelor's qualification work Roksoliana Liubachivska Ph.D. in
Economics

Which approved by Order of University from "25" September 2023 N! 25-09/2023-1 K

2- Deadline for bachelor's qualification work submission "25" April 2024.

3- Data-out to the bachelor's qualification work

Materials obtainedfrom an internship conducted in consultation with representatives of
a relevant company, alongside information sourcedfrom open internet resources,
articles. reports ofthe international organizations. and officialfinancial and economic
reports ofthe enterprise.

4- Contents of the explanatory note (list of issues to be developed)
Define planning as a critical component ofgeneral management and its significance in
organizational success. Provide an overview ofUni Travel as the case study
organization Explore the theoreticalfoundations ofplanning in management, drawing

from classical management theories (e.g., Henri Fayol's principles of management) to contemporary perspectives (e.g., strategic planning theories). Analyze the importance of planning specifically for Uni Travel. This could involve examining how effective planning has contributed to Uni Travel's success or addressing any challenges the organization has faced due to inadequateplanning.
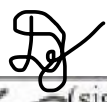
5. List of graphic material (with exact indication of any mandatory drawings)
Graphs and figures for analysis of economical and statistical information on the company and ifs development, visualization ofmechanism ofdevelopment, etc.

6- Date of issue of the assignment

Time Schedule

N!	The title of the parts of the qualification paper work	Deadlines	Notes
	I art of bachelor thesis	10-12.2023	On time
2,	11 of bachelor thesis	27-02.2024	On time
3-	Introduction, conclusions, sum	2-104.2024	On time
4.	Pre-defense of the thesis	29.04.2024	On time

_____ (signature)

isor _____ (signature)

Conclusions (genera/ description Ofthe mork; parii"i/3üfi0if scientific conferences/prepared scientific article; Ivha,i grade does the slude'it

The student has conducted an exploration of planning as a critical management function, elucidating its theoretical foundations, practical application, and significance within Uni Travel. Her analysis of planning processes, challenges, and best practices provides valuable insights for both academic study and practical application m organizational settings- The recommendations presented in work were thoughtful, practical, and reflective of the extensive research and analysis. In general, if successful defense; the thesis can clam to be "excellent".

Supervisor _____ (signature)

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INTRODUCTION

The tourism industry has been seriously disrupted in recent years due to global events and fundamental shifts in markets and technologies. Many tourism enterprises have struggled to adjust their strategies and operations to deal with decreased demand, evolving customer preferences, and new competitive forces. At the same time, the overall importance of tourism for economic growth and development has remained. In this context, strong economic planning is more vital and more challenging for tourism companies than ever before. There are growing gaps and inadequacies in the traditional planning approaches that are used across the industry. Therefore, it is crucial to find ways to support tourism firms in order to plan effectively for success into the future.

Every company has to clearly plan the future need for financial, labor, and intellectual resources, the sources of their acquisition, as well as be able to accurately calculate the effectiveness of the use of available resources in the process of its work. Planning plays a big role in business, helping to decide what the organization's goals should be, what the organization should do, and how to do it. It is with the help of planning that the management of the enterprise can establish the main directions for decision-making, which will shape its strategic focus and competitiveness.

In a market economy, entrepreneurs cannot achieve stable success if they do not clearly and effectively plan their activities. They should constantly collect and accumulate information about the state of the target markets and the position of competitors in them, as well as think about their own prospects and opportunities. Economic planning is one of the key factors of success in tourism business. For this reason the topic of the bachelor thesis is so relevant to the author's internship experience at a local tourism company.

The essence of any plan is that it is oriented towards the future: the choice of a goal as well as the determination of methods and ways of achieving this goal. The planning process allows one to envision the entire complexity of future business operations and predict what may happen. This is the key to survival in the modern environment that is characterized by high uncertainty, especially in Ukraine.

The aim of this bachelor's thesis is to study the planning of the activities of a local tourism enterprise, Uni Travel. The subject of the bachelor's thesis is the economic

planning at this tourism company. The object is the company itself. Effective economic planning is vital for the success of any business, especially in the highly competitive tourism industry. As the case study of Uni Travel demonstrates, tourism companies must carefully forecast demand, secure the necessary financial and human resources, and develop sound strategies to meet their goals. The economic planning process enables Uni Travel to allocate its limited resources efficiently, coordinate the various components of its operations, and adapt to changing market conditions. By analyzing the specifics of economic planning at this company, this research aims to provide useful insights into how tourism enterprises can optimize decision-making to maximize productivity and profitability. As such, the subject of this study – the planning policies and procedures in Uni Travel – have important economic implications not just for this firm but potentially for the tourism sector as a whole.

The objectives and sub-objectives of this study are the following:

1. To reveal the theoretical aspects of the planning process of tourism industry enterprises:
   - To demonstrate role and importance of economic planning in tourism companies
   - To conduct literature review of the approaches to economic planning
   - To explore the regulatory framework for economic planning in tourism

2. To conduct a quantitative analysis of the process of planning at Uni Travel:
   - To provide an overview of economic planning at Uni Travel
   - To conduct an in-depth analysis of current economic planning practices
   - To perform a quantitative analysis of economic planning effectiveness

3. To offer solutions to improve these practices:
   - To address the deficiencies identified in analysis
   - To provide recommendations to enhance economic planning
   - To show the financial feasibility of these recommendations

CHAPTER 1: GENERAL OVERVIEW OF TOURISM PLANNING

1.1. The role and importance of economic planning in tourism companies

As someone who studies tourism management, the author of this work highly values the important role that economic planning plays in the development of local tourism companies. If managed carefully, tourism can act as an economic machine and boost the economy. Thoughtful tourism planning considers the big picture and reproduces different scenarios to identify the most profitable opportunities that are consistent with the location's infrastructure capabilities (Pizzitutti et al., 2016). For example, comprehensive planning can predict future peaks in demand from emerging markets and recommend gradual expansion of capacity or new attractions to meet this demand (Sun et al., 2023). The planning process also requires extensive collaboration involving local authorities, businesses, conservation groups, community representatives, and other key stakeholders. This encourages productive discussions, the exchange of ideas, and important course-corrections. Carefully developed policies, brand strategy, and customer service initiatives outlined in a plan serve as a blueprint for sustainable growth. Of course, tourism planning does not end with the completion of the plan because continuous monitoring, analysis, and improvement are crucial for success.

Some organizations, just like individuals, can achieve a certain level of success without investing much effort in formal planning. Moreover, strategic planning alone does not guarantee success. An organization that creates strategic plans can fail due to errors in organization, motivation, and control (Olson, 2022). Nevertheless, formal planning can create a number of positive factors for an organization.

The current speed of change and knowledge creation is so great that strategic planning seems to be the only way to meet future challenges and opportunities. Therefore, strategic planning provides a basis for modern decision-making. It is closely connected to the organization's mission, objectives, and value proposition (see Fig. 1.1). Formal planning helps to reduce risks and biases, as well as create unity of purpose within the organization. Planning can be seen as a vital process for every existing system: a person, an organization, an enterprise, and a country. The practical use of planning can improve the functioning of both large and small business entities, an example of which is

considered in this work.

Fig. 1.1

Components of the strategic planning process (University of Minnesota, 2015)
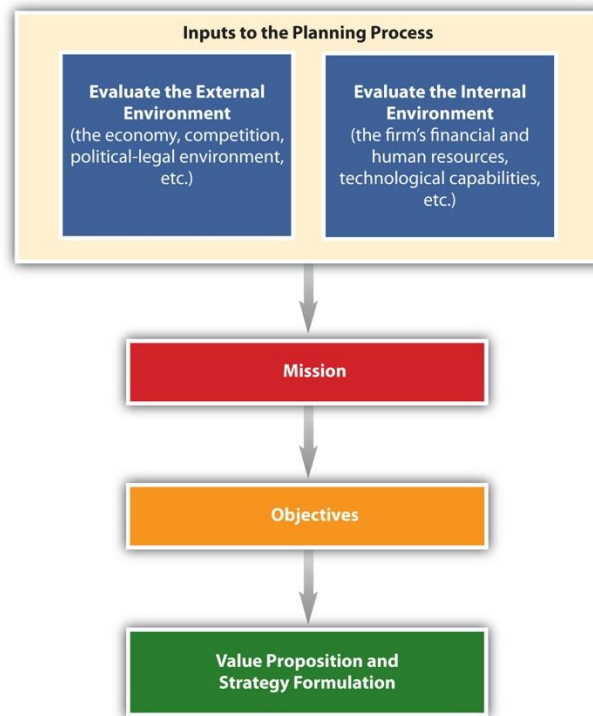
I fully agree with the theoretical observations that are provided above. It is hard to overestimate the importance of planning because it helps companies to gain clarity and be prepared to the problems that may appear in the future. They can create accurate budgets and create different scenarios and ways to overcome negative factors.

In general, the implementation of planning at the enterprise that operates in the tourism industry allows to:

1. *Lead the process of management because whoever has a plan, manages the process*. After a comprehensive plan is established, managers need to actively supervise every step of the way, such as creating schedules, making hotel reservations, and organizing transit (Uttarakhand Open University, n.d.). Frequent plan adjustments and monitoring guarantees that services stay in accordance with the initial strategy, allowing the travel agency to offer customers an outstanding and perfectly carried out travel experiences.

2. *Ensure the coordination of the work of the entire team and the participation of everyone in the activities of the company*. Leadership is an important factor as it

emphasizes the collaborative nature of the travel industry, establishes a common vision, and aligns team members with shared goals. Establishing an atmosphere where every member feel appreciated and heard is possible by having frequent team meetings and open lines of communication (Gibson et al., 2020). A productive environment where shared efforts result in exceptional service and memorable travel experiences for clients can be created by encouraging strong collaboration, which guarantees that each team member contributes their expertise.

3. *Justify the job responsibilities of each employee and the corresponding remuneration*. To guarantee that every team member is aware of their individual contributions to the agency's success, roles and responsibilities should be clearly defined. As such, compensation needs to be in accordance with the level of accountability and proficiency, reflecting what each employee provides to the company (The University of Arizona, 2023). This strategy of talent development and team building will encourage team members to feel appreciated and motivated to achieve the agency's targets.

4. *Systematize the available information about the state of affairs of the enterprise and the environment*. For successful leadership and properly informed strategic decision-making, information about the conditions inside and outside of a travel agency must be systematically structured (Momin, 2023). Building a huge database that records crucial information, such as sales results, client feedback, and business trends, is required for this. Updating and analyzing this data gives an opportunity to identify opportunities, threats, weaknesses, and strengths. This information can be used to make changes in business plans. A travel agency can maintain its flexibility, react to changes in the market in advance, and improve overall operational efficiency by putting organized data management practices in place. All of this requires a reliable plan.

5. *Clearly implement operational and strategic plans*. This means turning the strategic vision into steps and making sure that all team members understands their part of responsibility in reaching the goals that have been established. Open communication is necessary, along with continual updates and channels for

feedback to handle problems and adjust to changing situations (Hall, 2023). It is crucial to track progress against established targets, allowing for timely adjustments and improvements. Furthermore, it is necessary to ensure that employees have the skills and resources needed to carry out plans successfully. There should be a united and purposeful approach to business goals and daily operations.

6. ***Monitor the state of affairs of the organization***. In order to make the necessary changes in different situations, tourism businesses should monitor their state of affairs. For example, they should track key performance indicators (KPIs) on a regular basis, including sales targets, client satisfaction, and operational effectiveness (European Travel Commission, 2017). It is important to quickly identify areas of weakness that might need improvement by creating a strong monitoring system that enables tactical and strategic changes. Tracking also makes it possible to be on a wave of new trends in the tourism industry, which helps to stay more flexible and adaptable to changing consumer demands and market conditions.

7. ***Prevent the negative impacts of the external and internal environment***. On the external front, managers need to analyze the political, social, economic sociocultural, and legal factors that may affect the enterprise's operations. Internal problems can also put performance at risk and affect client loyalty. Such issues include high employee turnover, outdated business methods, and unreliable service quality. Therefore, investing in workforce development and promotions to retain skills is essential. Furthermore, it is necessary to implement innovative practices (Tsonev and Kaleychev, 2018). For instance, in order to increase productivity and encourage data-driven decision-making, tourism companies create a system for operational data sharing via integrated databases or other methods.

The evidence that is presented in the previous section shows that planning is highly important for tourism companies. It is obvious that it can help them to deal with changes in the external and international environment. Planning can also guide firms and help to manage resources more effectively.

Internal and external risk reduction should be explored in greater detail because they are crucial for optimal performance and business success. Furthermore, one of the key purposes of economic planning is to manage these risks in the most effective way possible. Some of the internal threats can be alleviated by standardizing service quality through updated employees' rules and training (Kachniewska, 2017). In an environment of high competition, successful agencies concentrate on the basics, such as customer satisfaction and optimization of costs. Furthermore, plans for developing a tourism business ought to include a crisis management plan, which includes four steps (see Fig. 1.2). There will unavoidably be pandemics, economic downturns, and natural disasters. The accuracy and effectiveness of the companies' emergency response plans is what sets flexible businesses apart from vulnerable ones. To ensure that their organizations are resilient, tourism managers need to analyze various disruption scenarios and select appropriate preparation methods through stress testing (Kalinichenko et al., 2021). Travel companies can navigate through disruptions by addressing all of the operational, legal, and contingency issues through careful planning and execution. Businesses that adopt the credo "failing to prepare means preparing to fail' and make investments in people, procedures, and cooperation will achieve success in the modern environment of high uncertainty.

Fig 1.2

Steps in creating and maintaining a crisis management plan (NSF, n.d.)
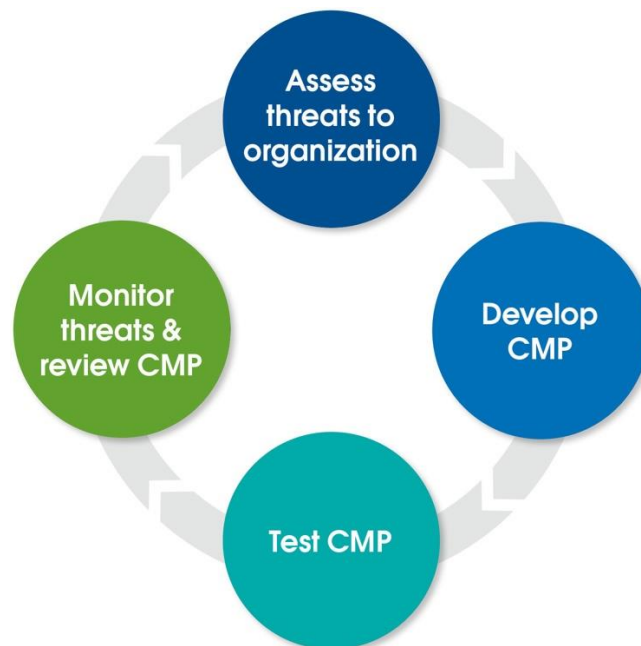
Talent development is another essential aspect of strategic and operational planning in tourism companies. Continuous education and reward programs are the key methods of facilitating this process. Through continual learning in internal training programs and skills workshops, workers can gain up-to-date knowledge, while travel agencies can encourage employee growth (Dennison, 2023). Staff is also motivated and retained when their outstanding achievements are acknowledged through bonuses and various performance awards. Travel companies must make sure that they have highly skilled, motivated, and dedicated employees that drive customer satisfaction and long-term success by investing in both ongoing education and rewards programs. All of these initiatives and programs must be an integral part of operational and strategic plans.

Furthermore, managers should be remember that integrated data systems facilitate effective and knowledgeable decision-making, which can aid in planning. Data accessibility and transparency enable quicker and more accurate analysis and reporting to guide decisions. As mentioned previously, tourism companies should maintain important statistics on sales, customer reviews, recruiting needs, and other data points within their interconnected systems. Thanks to these advanced information systems, travel businesses can respond to real-time changes in their environment rather than relying on incomplete or inaccurate information.

In addition, planning should include requests for certifications that confirm supplier reliability. Before any collaboration with a tour operator, it is essential to ask for all certificates that can confirm their background and trustworthiness as this ensures that all parties involved in the customer experience uphold strict rules (Marin-Pantelescu et al., 2019). Asking for verification of certificates, tourism businesses can reduce partnership risks and confidently guarantee safe and responsible travel for customers.

In addition, emergency scenario planning and methods for readiness can be deployed for better strategic management. In tourism, scenario planning entails preparing for emergencies like health incidents, extreme weather, or instability in politics (Pizzitutti et al., 2016). Implementing employee training programs, frequently making emergency strategy updates, and using diverse methods of communication guarantees that the company is well-equipped to act immediately and protect consumers' safety in

unexpected circumstances.

Finally, surveys of customer experience are an effective method of quality control – they can assist in both strategic and operational planning. Surveys give the company an opportunity to directly collect feedback on many aspects of the travel services provided, evaluate customer satisfaction, identify areas that require improvement, and modify offerings in accordance with changing customer preferences (Dolnicar, 2020). Companies may use surveys to communicate with clients by collecting their feedback, promote a customer-focused strategy, and consistently improve the quality of travel services they provide.

In basic terms, I can see that businesses that maintain ethical regulations while developing their employees' skills and effectively using technology have a stronger chance for sustainability and long-term risk reduction. Travel agencies can provide outstanding and unforgettable customer experiences for years to come by focusing on areas that are under their control, using their best practices, and demonstrating adaptability. Mindful preparation through careful planning and execution creates the foundation for long-term success.

1.2. Approaches to economic planning: overview of literature

Economic planning is vital for tourism companies because it helps to use resources efficiently, manage costs, and maximize profits. The highly competitive and changing nature of the tourism industry, along with complex external factors, makes effective planning uniquely challenging. A review of research reveals a range of quantitative and qualitative approaches that can be used for economic planning specifically to tourism firms. This literature review provides an overview and critical analysis of models and methods applied for tourism planning in current research. The aims are to synthesize key findings, compare strengths and limitations across different techniques, identify open questions for further study, and discuss implications for both scholarship and practice. While a number of forecasting and optimization models have been designed, scenario planning and financial modeling remain the predominant frameworks that are used in the tourism industry. Available studies provide valuable insights but also have limitations in data sources, analytical depth, and practical guidance. Additional investigation is needed

to combine quantitative modeling with qualitative methods in order to improve the effectiveness and accuracy of planning.

Description of planning approaches

Both quantitative models and qualitative techniques can be used in the planning process. Forecasting models rely on time-series data and regression analysis to predict tourism demand and set targets (Onder & Wei, 2022). On the other hand, scenario planning considers alternative external environments and implications (Pizzitutti et al., 2016). Furthermore, SWOT analysis can be used to evaluate internal strengths/weaknesses and external opportunities/threats. One should also mention financial modeling due to its remarkable ability to project financial metrics in order to guide more efficient resource allocation (Santa Clara University, n.d.). In addition, risk modeling can be used to assess the probabilities and impacts of disruptions. Optimization models represent another key tool for planning – they employ mathematical programming to help achieve various objectives, like higher profitability (Kallrah, 2021). Finally, qualitative approaches incorporate expert input and methods like Delphi surveys and value chain analysis (Lin & Song, 2015).

Next, it would be reasonable to explore each of these approaches on a deeper level. Forecasting is widely used in tourism planning, with models like ARIMA, Holt-Winters, and multiple regression being applied to predict visitor volume and spending (Sennaroglu & Zayat, 2020). These approaches can help to extrapolate historical trends, but they are not practical for accounting for disruptions. Scenario planning is perhaps the best tool that was adopted in the tourism industry to reduce external risks by outlining plausible futures (see Fig. 1.3). Using this approach, managers need to identify key uncertainties, craft positive and negative scenarios, and assess their strategic implications. SWOT analysis is utilized in tourism planning to audit internal capabilities vs threats in the environment (Momin, 2023). After a careful analysis of strengths, weaknesses, opportunities, and threats, managers can develop sound strategy. Financial modeling projects income statements, balance sheets, investment returns, and risk metrics to inform resource allocation, budgeting, and expansion decisions. Risk analysis complements financial modeling by quantitatively estimating disruption probabilities and impacts. Optimization

models take tourism planning goals and limitations as inputs to mathematically determine resource allocations that maximize key objectives, such as profit, market share or social welfare (Shojatalab et al., 2023). These models can be used to manage pricing, marketing spending, expansions, and other decisions based on certain estimates. Qualitative approaches, like Delphi panels, value chain analysis, and McKinsey's (2008) 7S model, incorporate manager inputs and, thus, leverage industry expertise. Despite that they lack predictive power, these models can be used in many other ways.

Fig. 1.3

Scenario planning (Veldsman, n.d.)
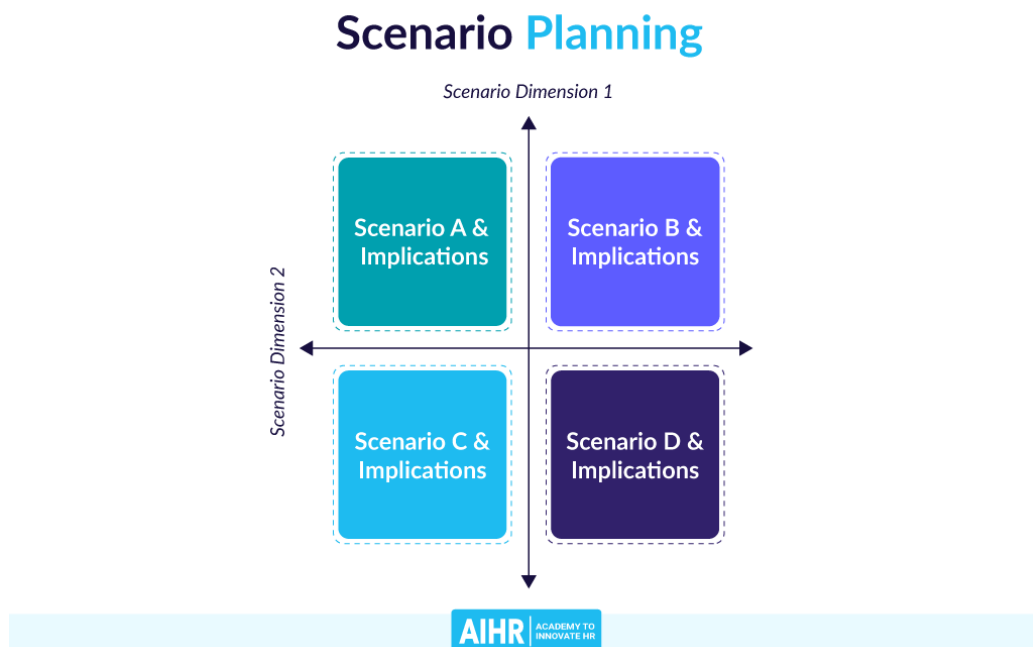
Each of the above-mentioned approached has particular strengths and weaknesses. Therefore, combining forecasting, financial modeling, and qualitative assessments is apparently the best option for tourism planning (Cox et al., 2001). This approach will allow to capture numeric projections, risks, expert wisdom, and strategic considerations. Therefore, tourism planning should leverage both quantitative data and qualitative insights to create advanced analytical techniques. Standardized public databases providing historical statistics on visitor arrivals, occupancy rates, tourism spending, and hospitality finances can be used for time-series forecasting and regression analysis of past trends (UN Tourism, n.d.). Survey data gathered from customers and travel managers can also provide valuable insights into company and industry performance.

As for scenario planning, this method relies more on expert judgment regarding different uncertainties, such as economic shifts or demographic changes, that may impact future tourism. Data from relevant fields, such as climate science and macroeconomics, can be incorporated into tourism planning to predict external changes (Filho et al., 2023). This information may be processed via different analytical techniques. Statistical forecasting models can include time-series analyses to capture seasonality, while exponential smoothing can be helpful for producing better predictions (Malkari, 2023). The use of causal models, optimization algorithms, and Monte Carlo simulation may further deepen the insights gained from the statistical forecasting.

Furthermore, it is important to note that tourism planning is increasingly incorporating cutting-edge techniques and technologies. The power of modern computers allows users to use artificial intelligence to conduct in-depth research in various spheres. For example, natural language processing can be applied to online reviews and blogs to improve visitor profiling (Álvarez-Carmona et al., 2022). Comprehensive simulations can test pricing and expansion strategies. However, analytical expertise and critical interpretation remain vital to properly manage models, find representative and unbiased data, and avoid overreliance on statistically optimized projections. Multi-method blending of quantitative and qualitative techniques backed by risk analysis, strategic consideration, and clear communication is the best approach to tourism planning.

Comparison

The quantitative models and qualitative techniques mentioned above each have relative strengths and limitations for tourism planning. Statistical forecasting models benefit from standardized longitudinal data to quantify relationships between variables of interest, like visitors and room nights, lending apparent precision and objectivity ("Statistical Models for Longitudinal Data," 2012). However, their reliance on historical trends makes them vulnerable to the so-called "black swan" events (Taleb, 2007). They also require extensive data which is often scarce at certain destinations. On the other hand, techniques like Delphi analysis directly gather expert insights about business opportunities and pitfalls, but they can reflect cognitive biases.

In practice, factors like data availability, planning horizons, competencies, and strategic priorities, shape which approach or combination is the most effective for tourism economic planning. Long-term scenario planning is beneficial for travel companies that are concerned about climate change, energy transitions, aging populations, or regional instability over the next 20-30 years (Vorster et al., 2023). Budget optimization can help such companies to manage resources, while client profiling and scoring techniques will be useful for better serving customers, providing them with excellent travel experience (Song, 2022). Training programs are essential to realize the full potential of these planning approaches.

Ultimately, combining quantitative and qualitative projections helps to increase the effectiveness of economic planning at tourism companies. Technical approaches provide valuable data-based insights, but human judgement is still crucial for asking appropriate questions, identifying sustainable goals, selecting the most suitable tools, gathering reliable data, and interpreting the results. Synchronization of analytically-powered insight with human oversight is best way to strengthen leadership in the tourism business and ensure that the plans are realistic and flexible.

Fundamental debates in tourism planning approaches

Tourism research reveals some fundamental tensions and open debates about quantitative and qualitative forecasting techniques. Here are some of the key areas requiring further investigation: data limitations, extension of accountability, integration of complex systems, and implementation of emerging innovations. Each of these spheres should be examined in detail.

First of all, it is necessary to explore the problem of data limitations. When trying to conduct in-depth research in tourism, one will inadvertently face the problem of finding adequate, high-quality data for modeling and making reliable forecasts (Zhang et al., 2021). Visitor arrival statistics remain aggregated at regional or national levels rather than local community destinations. There is a lack of nuance in terms of market segmentation, customer experiences, and costs. At the same time, privacy regulations restrict access to potentially relevant behavioral data from online and mobile activity. On the one hand, surveys and expert opinions can offer valuable information. However, these sources

involves the risk of bias, which may undermine planning. These data gaps make forecasting models less powerful – be it a regression analysis, optimization algorithm, or a simulation. In order to improve data availability, it is necessary to centralize infrastructure, implement open data standards for sharing insights, and use machine learning to extract data from new alternative sources.

While modeling in the tourism industry has historically focused on visitor volumes, seasonal changes in demand, and direct revenue projections, attention has recent shifted to incorporating a wider range of metrics, such as sustainability (Song & Li, 2008). Sustainability requires companies to use environmental indicators, such as emissions, waste accumulation, and biodiversity preservation. In addition, it is necessary to consider the sentiments of local residents, congestion levels, housing affordability, commodization of culture, and many other socio-economic factors (Alamineh et al., 2023). Larger companies and regulatory bodies must ensure equitable distribution of tourism-related benefits, such as job access and revenue streams (Organization for Economic Cooperation and Development, 2020). Finally, there is a need to enhance accountability through mandated environmental/cultural impact statements, mitigation policies, and even payment for ecological programs. These aspects should be integrated into tourism plans so that companies can become more sustainable and responsible for their operations.

There is also a lot of debate about the nature of forecasting models. Researchers do not agree regarding the best way to construct these models in order to make sure that they account for a wide range of complex, interconnected factors in tourism ecosystems (Fu et al, 2008). Computational constraints of older computers and slow implementation of innovations in econometrics historically limited researchers, forcing them to simplify forecasting models (Song et al., 2003). This problem created a wide range of risks, such as ignorance of the indirect effects of decisions, miscalculation of marketing expenditures, failed hotel expansions, disruptions in festival organizing, and other issues. More advanced simulations and machine-learning algorithms should be widely implemented by travel agents and other tourism companies because they can help to avoid many of the above-mentioned limitations. However these technologies have their own constraints as well.

I should also note that there are some exciting innovations in the tourism industry, such as geospatial analytics (they can visualize tourism networks), sentiment analysis of social media, and simulations of scenario implications. Big-data utilization, natural language processing, predictive booking, and rapid stress testing via computational simulations are just a few of modern digital tools (Belias et al., 2021). However, these technologies add complexity. Debates also continue on appropriately blending quantitative and qualitative approaches to achieve economic prosperity, environmental sustainability, and social enrichment.

In summary, gaps remain in data sources, accountability (both social and environmental), and forecasting models balancing simplicity with rigor. Innovations have the potential to change this situation, but they require careful implementation. Achieving an effective synthesis of qualitative and quantitative methods is one of the key priorities in tourism planning research. It is necessary to diversity data sources, test new technologies, implement innovative methods, and focus on skills development. There is a lot of ways to improve forecasting models, and each of them should be tested in tourism practice.

Implications for research and practice

To sum up this literature review, there are many research gaps in the tourism sector. Additional research can help to strengthen tourism planning methods and make them more useful in practice. Areas that need more scholarly exploration include:

- *Better data inputs*. There needs to be more detailed data on visitors/clients, their spending, experience ratings, and other behavioral/sentiment metrics. This information can be used to make better predictions and plans. Creating centralized databases with standard reporting requirements would help to achieve this goal. However, there are some serious concerns about the protection of privacy rights.

- *Testing and refining past projections*. It is important to test how accurate the predictions from planning models turn out. This will help to see where they succeed or fail. Looking back at past forecasts to critique their accuracy would

help to improve techniques over time. Setting expected ranges for uncertainty would also aid in planning potential risks.

- *Sustainability impacts*. More research should quantify sustainability measures, such as emissions, biodiversity harms, congestion levels, and community shifts. Putting economic values on these external impacts can better account for them in decision-making instead of only focusing on profit projections.

- *Systems integration*. Testing simulations that show connections between tourism decisions, resulting reactions, and wider impacts would build understanding. Although it is a complex task, integrating disparate information systems would aid in planning. Such initiatives can be used to generate unique insights.

- *Innovation evaluation*. As new technologies emerge around data analytics, virtual interfaces, and integrated dashboards, research should assess their appropriate adoption and usage. Studies on implementation results are crucial.

- *Skills development*. Training programs for tourism data analysts, planners, and managers should be refined in order to improve skills. Modern analysts in the travel sector must know how to frame insightful questions, choose appropriate models, assess their assumptions, interpret projections, and communicate their insights. Building competency frameworks, assessment tests, customized tutorials, and efficacy studies is vital for the future progress of this research sphere.

Therefore, practitioners must learn to clearly define planning goals and constraints first before selecting methods. They also need to consider community effects and sustainability factors beyond just demand and visitor volumes. Tourism managers overseeing analytics teams must foster transparency, critical thinking, and accountability while encouraging multifaceted research. Independent audits reviewing projection accuracy could provide constructive feedback about their work in order to promote organizational learning.

1.3. Regulatory framework for economic planning in tourism

Laws related to tourism economic activity

Tourism industry governance and economic planning oversight in Ukraine operates under a combination of national and regional legislation alongside industry self-regulation. Core legal acts include Ukraine's 1995 Law "On Tourism" which provides definitions, establishes the rights of tourists, and obligations of enterprises across different sectors, such as hotels, restaurants, attractions and transport serving visitors (Oleksenko et al., 2021). Licensing requirements for tourism activity and safety provisions are also set out. The Commercial Code of Ukraine also structures key aspects of commercial transactions and company registrations that are relevant to tourism businesses.

At a regional level, oblast administrations shape local tourism development policies and plans that are aligned to the area's priorities and assets. For example, Zakarpattia Oblast approved its *Tourism Development Program in Zakarpattia for 2021-2023* which aims to elevate the province as an attractive mountainous, eco-adventure destination through coordinated actions across government agencies, businesses, and community partners (Military Administration of Zakarpattia Oblast, 2022). Key objectives include improving competitiveness, establishing a province-wide tourism cluster, developing multi-language maps and guides, adding tourism signage, facilitating cross-border partnerships, and piloting agritourism initiatives.

While the national law "On Tourism" establishes foundational provisions, regional tourism development plans, like the one created for Zakarpattia Oblast, play an important role in coordinating stakeholders within communities through councils and activating local assets. However, funding constraints and administrative problems are serious barriers to the fulfillment of these plans in practice.

Government tourism planning & coordination bodies

The main authority for national tourism planning and development strategy in Ukraine is the Ministry of Economy's Tourism and Resorts Department. This body shapes major policies, approves investment plans, promotes local and international tourism, engages in statistical monitoring, and provides cross-sectoral coordination

(Ministry of Economy of Ukraine, n.d.). Its strategies aim to grow tourism activity based on the nation's cultural heritage assets, nature ecosystems, human capital, and infrastructure modernization in different regions. However, there is also the State Agency for Tourism Development of Ukraine (2024), whose mission is to foster "the growth of regional tourism potential and conducting impactful marketing campaigns to promote the country as an attractive tourist destination, both domestically and internationally." Therefore, this executive body plays a key role in tourism governance as well.

Regional coordination and management fall under the oversight of the Ministry of Regional Development, Construction, Housing and Communal Services which guides provincial tourism development programs along with many other functions (Government Portal, 2019). These programs are adapted to the unique landscapes, climate zones, historical attributes, and community objectives within each oblast. Poltava, Zakarpattia, and Lviv Oblasts are just a few examples of major regional tourism hubs that are overseen by the Department of Regional Development.

Although current inter-ministry coordination is rather weak, it would be reasonable to create a working group involving the Ministries of Economy, Ecology, Infrastructure, Culture, and Education. Such coordination would help to align policies, budgets, and administrative capacity. The National Fiscal Service should also be involved in this process. Its main function should be to deal with taxes and fees that could be used to fund the protection of heritage sites and promotion of Ukraine abroad.

Tourism industry regulations and self-governance

As small tourism enterprises operate and develop in all of the regions, industry associations play an important role in self-regulation, skills development, consumer protection, and policy advocacy. For example, there are national hotel classification standards (Ribas Hotels Group, 2020). These standards regulate the mandatory amenities, room sizes, and service levels for properties to achieve 1 to 5 star certifications. Licensed auditors verify these criteria. Tour operators must also complete certification courses in order to ensure that customer payments for package trips are protected. Furthermore, industry forums organizes annual large-scale tourist exhibitions, represents private-sector interests in policy discussion, analyzes industry trends, and offers training seminars. For

hospitality specifically, the Ukrainian Hotel & Resort Association (UHRA, 2021) acts as the main voice uniting owners, investors, developers, and professional managers. UHRA encourages experience sharing, runs marketing campaigns, and shapes industry standards.

Tourism data gathering and analysis

Official tourism statistics are gathered and reported by Ukraine's National Statistics Service which tracks different metrics on registered tourism enterprises, including hotels, entertainment venues, and tour operators. Occupancy rates, visitor volumes, and basic economic performance indicators tied to these registered corporate entities are published annually.

However, the large number of small companies operating informally (especially, in such spheres as private lodging, individual excursion services, and the sharing economy) makes data less accurate. Industry associations, thus, conduct separate market research surveying visitors at major events, airports, and hotels to produce both quantitative and qualitative analyses based on field interviews. They study consumption patterns, satisfaction levels, and activity interests.

Policy implementation challenges

Tourism governance in Ukraine involves many challenges, ranging from budget constraints to safety concerns that slow down progress on existing strategies and regional diversification goals. Competing political priorities make leadership unreliable, while funding allocated specifically to tourism promotion, infrastructure, and skills training is too limited. Ukrainian officials acknowledge the need to update the national tourism strategy inherited from Soviet-times, but bureaucratic complexity slows down these reforms.

Eastern-border provinces also continue struggling to attract visitors. Unfortunately, military conflict persists, discouraging travel agents from featuring destinations like Zaporizhya and Kherson, despite their rich heritage (see Fig. 1.4). While visa-free status for EU visitors aims to expand arrivals, consistent standards enforcement and consumer protection remains difficult, especially regarding informal establishments.

Fig. 1.4

Russian-occupied territory in Ukraine (Atlantic Council, 2023)

Opportunities for enhancement

Despite that different obstacles slow down tourism growth in Ukraine, there are still opportunities to improve resource coordination and stimulate local tourism. One of the ways to do this is to create an inclusive council involving representatives from government agencies, mayors, community partners, and major hospitality companies. This council should be based on the principles of constructive dialogue, collaborative diagnostics, and coordinated solutions. In other words, all parties should work in synergy rather than merely pursuing their limited interests.

Creating tax incentives, easing registrations, and simplifying licensing for micro tourism are some of the best measures that could help to nurture responsible entrepreneurship. More power should be delegated to the regional councils and providers. They need more resources that could be used to increase the attractiveness of each individual province. Responsible tourism governance and economic planning call for participatory processes, valuing local voices and insights.

CHAPTER 2: ANALYSIS OF ECONOMIC PLANNING AT UNI TRAVEL

2.1. Overview of economic planning at Uni Travel

Theoretical background

Planning is one of the most important functions of enterprise management, especially in tourism. As mentioned previously, planning is the process of determining the goals that the company intends to achieve in a certain period, as well as the finding ways to achieve them. Therefore, planning is an attempt to imagine a picture of the future. It is a process that requires the knowledge of the current state of affairs and the understanding of trends that can help to predict the future. Companies should also use reliable methods to simulate the transition from the current situation to the future predicted state. Thus, planning can also be defined as making decisions that ensure the effective functioning and development of the enterprise in the future. It usually involves the following elements: selection of goals, definition of policy, and development of measures and methods for achieving these goals.

Planning the activities of a tourist enterprise is a systematic process of qualitative and quantitative prediction that would help to achieve future goals. Therefore, it should include:

1. ensuring purposeful development of the organization;
2. coordination of activities of structural units and employees;
3. creation of effective control procedures.

Essentially, in the planning process, decisions are made about what the organization's goals should be and what its employees should do to achieve them. Therefore, a plan is a complex socio-economic model of the future state of the enterprise. In order to develop such a model, one should follow the three general stages of the planning process, which have a universal character:

1. setting planning tasks;
2. development of a plan;
3. implementation.

Numerous studies of the relationship between planning and enterprise performance have shown that enterprise planning usually leads to higher revenues, greater profits, and

an overall improvement in the financial and economic condition of the company. The main reasons for the need for planning can be formulated in the following way:

- Planning makes it easier to coordinate efforts. It is a reference point for both management personnel and rank-and-file employees (American Public University, 2024). When the entire staff understands where the company is going and what they need to do to achieve the goals, it is possible to manage the activities of the teams to achieve the goals much more effectively;

- Planning encourages managers and the rest of the staff to expect changes, respond to them appropriately, and consider the consequences of changes;

- Planning reduces the duplication of management tasks. It also helps to establish in advance the need for resources and identify the potential opportunities to acquire these assets;

- The goals developed in the planning process become the basis for the implementation of effective control (University of Minnesota, 2016). If there are significant deviations of the achieved results from the planned ones, it is possible to adjust the activities of individual units of the enterprise and achieve better final results.

Therefore, the implementation of planning at a tourist enterprise enables to:

- improve the quality of management;

- ensure the coordination of the work of the entire team and the participation of everyone in the activities of the organization;

- substantiate the job duties of each employee and the corresponding monetary rewards;

- systematize the available information about the state of affairs of the enterprise and the environment;

- understand the available financial opportunities and ways of using them;

- prevent the negative effects of the external and internal environment.

Tourism management planning begins with the process of strategic planning, which includes the development of strategic plans and programs. For a specific tourist region, first of all, its competitiveness is determined and a tourist image is formulated. The tourist

image of the region is evaluated according to such criteria as hospitality, quality of services provided, reputation, availability of opportunities for active recreation, development of transport infrastructure, conformity of the quality of services to the price, and other metrics (see Fig. 2.1). Each criterion is evaluated for a specific region, and a certain quantitative measure is assigned to it. As a result, it is possible to assess the advantages and disadvantages of the tourist region and propose ways and methods of its improvement. A strategic plan gives the firm more certainty and qualities that allow it to attract certain types of workers and, at the same time, avoid problematic ones. Strategic plans opens up a long-term perspective for the organization.

Fig. 2.1

Tourist image of the region

Uni Travel company background

Uni Travel is a small travel agency located in Rivne, Ukraine. It serves mainly local customers, arranging customized holiday trips to popular tourist destinations in Europe and the Middle East. Uni Travel specializes in booking flights, hotels, packaged tours, and getting visa paperwork for Ukrainian travelers going abroad for leisure trips. Customers can make booking requests online, by email or phone. The agency's owner is Lyudmyla (see Fig. 2.2).

Fig. 2.2

Lyudmyla (in the black chair) consulting Uni Travel clients

Top destinations are neighboring countries because they are easy to reach from Rivne airport: for example, Poland, Hungary, Czech Republic, Slovakia, and Austria. These destinations can offer visitors unforgettable experiences in old cities and heritage sites, which are accessible even for budget-conscious families. Also popular are winter beach getaways to resorts in Turkey, Egypt, and the Aegean area. Some customers request vacations to more faraway places, like Thailand, Dubai, and Dominican Republic, but high costs often prevent purchase. There is also occasional demand for visitation trips to Ukrainian diaspora communities in North America.

While economic instability and war in Ukraine currently slows tourism growth, the sector's potential still looks promising for Rivne and other mid-sized Ukrainian cities over the long term. The main reason for this is that regional wages and consumer aspirations keep gradually rising. Carefully balanced promotions could help the company to secure more European trips in the near term.

To expand further, Uni Travel maintains a lean operational structure. This small agency makes judicious use of online booking platforms and partnerships. Despite its

limited staff, the company provides personalized consultations to identify holiday trip choices that are aligned to customers' budgets and preferences (nature, culture, relaxation, or adventure).

Group discounts also incentivize family and friend travel parties to consolidate bookings across preferred hotels and flights. Loyalty offers sustain engagement with prior customers through seasonal deal alerts and peer referrals. Despite disruptions, resilient locally rooted travel agents can retain community trust, which help them to attract new customers and earn decent profits.

Uni Travel's planning process foundations

The key purpose of economic planning at Uni Travel is to support the general business priorities of profitability, growth, and operational efficiency. For a small travel agency competing in a dynamic industry, economic planning enables judicious allocation of resources to ensure financial stability during changes in the market. The main objective of planning is to maximize revenue across different services, control costs, and use opportunities for expansion.

Uni Travel uses a two-fold approach to planning, including both short-term tactical initiatives aligned to the financial year as well as longer-range strategic plans on a 5-year horizon. The 1-year plans detail concrete objectives, resource allocation, and success metrics, while the 5-year plan outlook evaluates growth potential, partnerships, and avenues for the diversification of services. This dual outlook allows the company to respond to immediate challenges while progressing towards its main vision.

Being a small company, Uni Travel's planning process involves collaborative participation across all leadership levels. The owner shapes the strategic direction, creates financial parameters, and approves annual plans. The general manager leads the planning process, sets targets, and oversees their implementation. Lowe-level managers contribute data from their line of work, such as sales, marketing needs, and technological issues. In addition, external stakeholders, such as financial auditors and industry consultants, provide valuable inputs to enhance the planning process and improve the company's performance..

The economic planning process results in clear 1- and 5-year objectives for different

metrics, such as revenue, costs, and resource allocation. It helps to determine expansion goals and strategic partnerships. All of these findings and insights become the basis for executive decisions on budgeting, marketing spending, entering new countries, building supplier relationships, technology investments, and hiring.

Uni Travel leverages cloud-based planning software that allows easy data integration, financial modeling, and scenario analyses. This enables collaborative updating of plans, evaluating choices, and monitoring progress through easy-to-interpret dashboards. These tools provide many insights that can be used to support decision-making and achieve business objectives. This software's flexibility makes it possible to adapt the company's strategic plans to the changing industry conditions.

Furthermore, demand forecasting is essential for a small travel agency like Uni Travel because it helps to estimate customer volumes and prepare operations. With just seven employees lacking complex analytical capabilities, the company's planning process relies primarily on practical experience. The key inputs are internal booking history from their reservation system and customer database. This information helps to measure the past popularity of different destinations and travel types. In addition, the management can analyze customer profiles and seasonal patterns. To stay in line with market developments, Uni Travel staff attend trade forums and chat informally with regular travelers.

Given resource constraints, statistical models are not practical. Instead, Uni Travel bases projections on simple year-on-year comparisons of bookings and expert judgment. The director gathers quantitative data, qualitative information (mostly, customer reviews), and staff perspectives on new trends. All of this information is ranked based on its relevant and credibility. Reliable metrics, such current bookings and destination reviews, are prioritized for short-term forecasts. Potential bookings are more important for long-term planning.

Collectively, all of these indicators, estimates, and plans shape key decisions on budgeting, staffing, inventory, and promotional campaigns. For example, customer volumes indicate revenue potential and operations capacity that is needed. The company spends a lot of time at the end of each financial period to analyze all of the data it gathered

and search for better ways to organize its operations in the next period.

In the unpredictable travel industry, success lies in understanding customer needs and behavior. In cases where it is impossible to use formal methodologies, Uni Travel relies on its practical experience and basic data to predict demand patterns. This tradition of intuitive forecasting helps the company overcome uncertainty when statistical models do not work.

However, in general, the company's methodology includes quantitative models, qualitative research, and staff expertise. By integrating all of the key inputs (logical and intuitive), the company can make accurate projects and appropriate business decisions for different planning periods. Uni Travel's methodology is rather unique because it relies on the company's strengths as a boutique travel agency.

Uni Travel's annual budgets is created based on the projections for main income streams and expense categories. Revenues are derived from service fees from flight bookings, hotel reservations, tour packages, and visa processing (see Table 2.1). Costs include staff salaries, sales commissions, technology platforms subscriptions, marketing programs, office administration, professional services, and other expenses.

Table 2.1

Income statement for 2020-2023

Income	2023	2022	2021
Revenue	8,400,000 UAH	9,800,000 UAH	11,200,000 UAH
Cost of Goods Sold	5,600,000 UAH	6,300,000 UAH	7,350,000 UAH
Gross Profit	2,800,000 UAH	3,500,000 UAH	3,850,000 UAH
Operating Expenses	1,750,000 UAH	2,100,000 UAH	2,450,000 UAH
Net Income	1,050,000 UAH	1,400,000 UAH	1,400,000 UAH

With modest cash reserves below $20,000, Uni Travel has to carefully prioritize its expenses and investments (see Annex B). The budgeting process is based primarily on data from past financial periods, allowing the company to decide which opportunities or needs should be addressed first. Technology and marketing are usually the top priorities because they help to generate sales. Promotional campaigns are used by the company to covert customer demand into revenue and profits. The company's management also

dedicates a lot of time to analyzing different investment options in order to improve the quality of services.

Uni Travel's team holds monthly reviews on revenue progress, margins, and cash flow relative to annual budgets. Key activity ratios, such as bookings per agent, reveal the company's operational effectiveness, while return rates reflect changes in customer loyalty. Marketing analytics also help to measure campaign success and areas that require optimization. If Uni Travel incurs some unplanned expenses, it create additional plans to cut costs on promotions, partnerships, or temporary hiring before taking finances out of reserves. On the other hand, if there is surplus money (expenses were lower than expected), then the company may fund some opportunities to improve its competitive advantages.

Variable compensation that is connected to sales productivity makes up 15% of staff earnings at Uni Travel. By exceeding booking targets, agents can earn bonuses, while underperformance usually leads to coaching. The main goal of this policy is to encourage employees to focus on growth.

Overall, this general approach to financial planning and budgeting is pragmatic, although it can be inaccurate sometimes. Nevertheless, it is appropriate for a small tourism company. Quick response to emerging signals in this dynamic industry is more important than gathering adequate data and conducting complex analyses. By concentrating on workforce unity around key performance metrics, Uni Travel builds maintains its resilience and adaptability.

2.2. In-depth analysis of current economic planning practices at Uni Travel

Uni Travel mainly bases its demand forecasts on studying past booking data and having conversations with travelers. This approach relies more on staff judgment rather than statistical models. It allows flexibility but has some risks of bias.

Their methodology first looks at detailed sales records in Uni Travel's reservation system. This data includes historic demand for specific destinations, trip types, customer groups, and seasons. Next, the company's staff talk to travelers, check travel forums, and monitor competitor offers. This gives them a feeling of market shifts.

With only 7 employees lacking analytics expertise, they keep the process simple.

The sales head combines the results of data analysis with insights from conversations with customers into the final projections. Some cross-checking between staff helps to reduce bias. However, there are no complex models to calculate confidence levels.

Essentially, Uni Travel has knowingly chosen responsiveness over precision in forecasting. For them, practical needs outweigh pursuing perfection. It is more reasonable for the company to use its limited resources to build close customer relationships instead of spending them on complex planning systems. Still, the lack of rigorous statistical validation increases of risk of subjective error and other human-related issues.

In general, resource constraints make it problematic to implement complex statistical tools. However, combining past data, feedback from customers, and scenario planning allows the small agency to creates reasonable demand estimates. The simplicity of this process also allows the company to adjust its projections at any point to account for changes in the internal and external environment. Therefore, this methodology is appropriate for Uni Travel.

After an exciting internship in this company, the author realized that it really benefits Uni Travel to have constant contact, interviews, and conversations with its customers. This gives the company a unique understanding of travelers' thinking and feelings. It helps Uni Travel to customize offerings to match the needs and interests of people they serve. However, without double-checking and adjusting forecasts over time, biases could skew the demand predictions and make them totally unreliable. Therefore, it is important to constant challenge assumptions and keep track of reality.

Fortunately, Uni Travel's small staff can get together quickly and update plans when needed. Their experience lets them gather and combine insights faster in order to change their course. However, without a deep analysis of uncommon risks, they are sometimes overconfident in their estimates about future demand. Even after mapping many scenarios, they cannot account for all unforeseen changes in their complex business environment.

Without consultations with independent experts, biases and misjudgments tend to distort Uni Travel's planning. Recent events often skew future judgments. Furthermore, their desire to agree as a team reduces their critical questioning of assumptions. As a

result, the planning projections the they produce often have errors and do not correspond to reality.

Additionally, comprehensive planning requires companies to measure risks and variability using advanced statistical methods. However, Uni Travel does not quantify confidence levels, error margins, or the normalcy of data distribution. Instead, they often let optimism dominate their predictions while paying less attention to pessimistic scenarios. If their models were more rigorous, they would show a wider range of scenarios to prepare for pessimistic, most likely, and optimistic outcomes. So again, not measuring uncertainty leaves clear gaps in the company's planning practices.

However, it is important to remember that maintaining intimate customer relationships offers some advantages for a small agency that statistical tests cannot replace. Client conversations provide rich qualitative insights into travelers' psychology. Standard customer satisfaction surveys usually cannot capture such intricate details. Furthermore, the staff's collective experience also brings them certain advantages over pure technical analytics. Through quick coordination, they can adapt their offerings to market changes.

Fundamentally, Uni Travel's demand planning aims to blend practical research with standard quantitative analyses, although not always successfully. They have consciously chosen high responsiveness over rigorous modelling due to their limited resources. Still, they can benefit from some improvements by adding more measurements and objectivity. For example, the company could use:

- External reviews of past forecast accuracy;
- Quarterly adjustment of scenarios and projections;
- Interviews with lost customers about the reasons why they stopped using Uni Travel's services.

Such steps can help the leadership of Uni Travel to avoid overconfidence and inaccurate projections. It is important to spend more time and resources on external consultations as well as finding new methods for scenario planning. All of this will be critical for the company's future success.

The budgeting process at Uni Travel

The company's budgets rely mostly on ratios and figures from previous years' profit/loss calculations, current year performance, and expected conditions going forward. The company creates budgets based on all of this prior information and vision of the future. Some of the key data that is included in this analysis is the following: flight booking fees, hotel commissions, or relative allocations towards staff salaries and marketing spending from overall costs. The company makes some adjustments to account for new investments, campaigns, or other changes. However, for the most part, historical figures guide budgeting calculations.

Performance tracking

On a monthly basis, Uni Travel's leadership team meets for budget reviews in order to track actual revenues and costs against planned budgets. Comparing total bookings month-to month and per-agent is a helpful productivity metric. Customer return rates are used by the company to measure loyalty, which can potentially affect future demand. Marketing cost per acquisition is also a useful metric that helps to understand how effectively the company is using its marketing resources. When gaps between actual figures and budgets arise, the team discusses whether some non-financial solutions may help to resolve issues or if reserves need to be used to handle the situation.

Incentive alignment

To encourage sales staff performance, the company uses a bonus system. These bonuses can add 50-200% more to the base compensation. These additional payments are directly tied to booking sand customer conversion rates. Strong performance results in higher bonuses for sales employees. However, the sales targets are constantly adjusted based on market conditions. The company aims to achieve a perfect balance between motivation and realism regarding sales expectations for the coming year. Lower bonus thresholds ease staff pressure, allowing them to earn benefits from high-quality work. As market conditions stabilize, normal incentive structures usually return with occasional reviews.

Issues in current budgets

There are several serious issues in the current budgeting methodology at Uni Travel. The lack of comprehensive information limits forecasting accuracy. The company simply

cannot conduct sophisticated data analyses without advanced technology and competent specialists. Therefore, their planning is dominated by simple yet practical calculations. The absence of statistical predictive power means that budget projections usually follow rather than predict external impacts.

Moreover, discussions of budget changes are often limited to urgent issues, such as payment delays or advertising disruptions. These negative events are prioritized by the team because they require rapid responses. The workers often do not have time to investigate the root causes of changes in financial performance. Developing risk parameters and monitoring early indicators could help the company to generate warnings rather than react to surprises. Building more comprehensive scenarios can support contingency planning as well.

Overall, current business environment requires pragmatic approaches to planning finances. As Uni Travel grows into a larger company, introducing new analytical methods would help to increase its resilience and planning effectiveness. Combining practical art and science in budgeting practice would help Uni Travel to deal with future challenges.

Looking deeper at customer behaviors

Uni Travel mainly utilizes basic booking history and surveys to uncover customer needs over time. Grouping travelers simply as frequent or occasional bookers allows the company to analyze certain differences between them: Do heavy bookers prefer certain destinations or transport options? How price-sensitive are infrequent travelers? Even short surveys can provide valuable ideas for service improvements and new destinations for better personalization. Gathering large amounts of information to track individual consumer journeys would strengthen loyalty through customized offerings. However, basic segmentation and listening still helps to generate insights without overcomplicating things.

Modeling different future scenarios

Tourism inherently faces volatility from economic swings, health regulations, geopolitics, and other factors. Uni Travel can construct better models simulating the possible scenarios of demand ups and downs using historical sales data and the team's industry experience. Mapping best case, moderate case, and worst case scenarios will help

to understand how negative factors could create different risks – from fuel inflation to visa restrictions.

Expanding data sources

Rather than relying solely on Uni Travel's past booking data, the company can monitor relevant tourism indicators. This would help to understand the potential future challenges and current opportunities. Tracking wider industry performance, competitor pricing shifts, consumer travel intent, and economic indices would provide environmental context and signals that cannot be understood through internal analysis. Even simple Google News alerts on emergent hot destinations can help. By increasing the number of information sources, the company can reduce its blind spots. Partnerships with new hotels, airlines, and review sites would further allow to strengthen the company's data on external environment, which is essential for accurate long-term planning and forecasting.

Early indicators

Early indicators emerge before the collected data reveals the full changes in the company's performance shifts. These signals can be used to respond to the problems before they become worse. Monitoring web search dynamics or early booking changes can be used to predict demand swings. Observing competitors' price moves can help to understand their expectations of market needs. Macroeconomic variables, like oil costs and currency rates, are also insightful because they influence people's desire and ability to travel. Tracking all of these early signals allows Uni Travel to recognize changes sooner and respond to them more effectively. However, it is important to interpret data correctly, not just gather it in large quantities.

Therefore, blending statistics and expert judgment is one of the ways Uni Travel tries to improve its planning. This is a normal approach, considering that small growing firms often emphasize flexibility and practicality. Nevertheless, there is an opportunity to improve the accuracy of the company's forecasts by applying the methodology that is proposed in the next section.

2.3. Quantitative analysis of economic planning effectiveness

Objective

The main objective is to review the accuracy of Uni Travel's demand forecasts and

budget projections for 2023 to identify areas for enhancement.

Data

The following data were used in this task:

1. Uni Travel Revenue Data (Actual vs Projected, 2023)

    - Europe Tour Packages: $100k actual vs $125k projected

    - Domestic Hotel Bookings: $40k actual vs $47k projected

    - Flight Bookings: $20k actual vs $28k projected

2. Total Expenditures (Actual vs Budgeted, 2023)

    - Marketing: $8k actual vs $10k budgeted

    - Salaries: $80k actual vs $79k budgeted

    - Technology Maintenance: $3k actual vs $2.5k budgeted

Forecasting Simulation (Europe Tour Packages)

    - Tested exponential smoothing method on 2021 data

    - 2023 Model Forecast: 115k +- 5% vs Actual: $100k

Methodology – Tourism Planning Optimization Program (Python-Based, Self-Developed)

To simplify data-driven decision making, the author developed a Python program for tourism companies, named Tourism Planning Optimization Program (TOPO). TOPO integrates the various steps required for accurate demand forecasting, budgeting, and quantitative performance tracking (see the code for this program in Annex A). It includes the following elements:

    o Data Inputs: TOPO allows importing multiple data source files, including past booking records, profit/loss statements, regional tourism indicators, weather data, hotel feeds etc. Advanced Python libraries can be used to clean, transform, and merge these datasets for analysis.

    o Forecasting Module: For demand projections, TOPO provides a menu of template time series and regression models to test different forecasting techniques and compare performance metrics to identify the best approach for a given situation. Users can tune parameters or run ensemble models for enhanced accuracy.

- o Budgeting Module: TOPO's budgeting module uses historical ratios and averages alongside user growth assumptions. Monte Carlo simulations can be used to create probability distributions for revenues and costs. Scenario planning tools can visualize projections.

- o Analytics Module: The analytics module evaluates model simulation accuracy versus actual business metrics retrospectively. Statistical tests identify biases. TOPO generates diagnostic reports highlighting different ways to improve forecast reliability and budgeting effectiveness for fine tuning.

- o Benefits: The integrated TOPO program in Python increases efficiency in economic planning for tourism organizations by:

  1. Consolidating data from different databases
  2. Automating and comparing analytic techniques
  3. Providing easy-to-interpret projections
  4. Enabling ongoing model improvements
  5. Empowering data-driven decisions tailored to the business

Analysis Process

Calculate forecast error metrics (MAPE, RMSE etc.) using TOPO

Identify biases – over/under-estimation tendencies

Review expense deviations and model simulation outputs

Link deviations to root causes

Highlight priority enhancement areas

Calculation Formulas

Mean Absolute Error (MAE)

$MAE = \sum_{t=1}^{n} |A_t - F_t| / n$

Where:

A_t = Actual value

F_t = Forecasted value

n = Number of periods

Mean Absolute Percentage Error (MAPE)

MAPE $= (100/n) * \sum nt=1|((At - Ft)/At)|$

Where:

At = Actual value

Ft = Forecasted value

n = Number of periods

Root Mean Squared Error (RMSE)

RMSE $= \sqrt{(\sum nt=1(At - Ft)2 / n)}$

Where:

At = Actual value

Ft = Forecasted value

n = Number of periods

Mean Error (ME)

ME $= \sum nt=1(At - Ft) / n$

Where:

At = Actual value

Ft = Forecasted value

n = Number of periods

The program would calculate these formulas using the actual and forecasted demand data to measure its accuracy.

Result

Metric	Value
Mean Absolute Error (MAE)	$8,750
Mean Absolute Percentage Error (MAPE)	9.13%
Root Mean Squared Error (RMSE)	$10,000
Mean Error (ME)	-$8,000

Interpretation

Based on the sample results from the TOPO program with the error metrics calculated between actual and forecasted tourism demand data, here is an interpretation:

Mean Absolute Error (MAE):

The MAE of $8,750 indicates that on average, the demand forecasts deviated from the actual numbers by around $8,750 per period.

Mean Absolute Percentage Error (MAPE):

The 9.13% MAPE suggests that on average, the demand forecasts were inaccurate by about 9.13% relative to the actual demand numbers. This measurement by the actual percentage provides valuable insights into the level of forecast error.

Root Mean Squared Error (RMSE):

The RMSE of $10,000 is the square root of average squared errors. It captures larger deviations more prominently.

Mean Error (ME):

The negative ME of -$8,000 tells us that on average, demand was overestimated rather than underestimated in the projections.

Overall, TOPO provides a multifaceted view on the accuracy of forecasting in the travel industry. The errors that were identified in this analysis show that the Uni Travel tends to overestimate its forecasts. Therefore, this is a great opportunity to improve its demand modeling. Statistical techniques can be adjusted to further minimize biases.

Recommendations to focus on

The quantitative analysis of Uni Travel's demand forecasting performance reveals some serious gaps. While mathematical and statistical techniques can be further improved, the company should mainly focus on reducing its biases and implementing better software, such as TOPO. The management should question their core assumptions about forecasting. Apparently, they are too optimistic when making their assumptions. In addition, there can be some problems in teamwork that do not allow better ideas or projections to be adopted. Due to data limitations and constant changes in demand, it is really hard to make accurate forecasts in the travel industry. Besides just numerical models, companies have to consider the impact of other factors, such as human behavior and unforeseeable events. Therefore, the management has to analyze all of these issues and determine the root causes of their biases and mistakes.

While the permanent challenges, such as data scarcity and changes in consumer

behavior/tastes, are unlikely to disappear, the final recommendation is that the Uni Travel leadership has to improve their analytical procedures for demand forecasting. They can explore different types of affordable software and invest some resources to create their own program that would meet their unique needs. Change is a key attribute of progress, and it should be embraced in this case for sure.

CHAPTER 3: IMPROVEMENTS TO ECONOMIC PLANNING AT UNI TRAVEL

3.1. Addressing deficiencies identified in the analysis

The analysis conducted in Chapter 2 revealed several deficiencies in Uni Travel's current approaches to demand forecasting, budgeting, and quantitative performance tracking. While the company has emphasized responsiveness and practicality given its size and resources, the findings show gaps that may undermine the accuracy and effectiveness of economic planning. In particular, demand forecasts demonstrate over-optimistic biases along with limitations in data and statistical validity testing. Budgeting depends heavily on historical data without deeper analytical insights into potential changes. Performance monitoring is also lacking, which further decreases the quality of forecasting.

This section will outline a number of initiatives to enhance Uni Travel's economic planning and governance based on the identified weaknesses. Improving forecasting objectivity, budgeting practices, analytical capabilities, and strategic thinking will help to improve the company's resilience and decision-making. Some of the recommended solutions include the use of new techniques and technologies, expanding data inputs, hiring specialists, implementing training, and cultivating an insights-driven culture. With significant investments to address its planning mistakes, Uni Travel can continue balancing the practicality and accuracy of planning as it grows. Carefully designed improvements will enable the company to maintain its flexibility while adding the much-needed analytical tools.

Addressing forecasting biases and limitations

A key area for improvement is introducing new processes to minimize biases and enhance the statistical power of Uni Travel's demand forecasts. While the current intuitive approach has some benefits, findings reveal that there are over-optimistic distortions. Therefore, implementing analytical techniques can improve objectivity.

Firstly, new statistical tests should be conducted to mathematically detect biases in past projections. Hypothesis testing and confidence intervals will help to measure any systematic issues caused by over- or under-estimation. Other metrics, such as p-values

and t-scores, will show if forecast errors significantly differ from zero. Any biases that will be found can then be addressed by adjusting forecasting models.

Alongside statistical tests, regular external reviews of past forecast accuracy by independent experts might provide constructive critiques to improve Uni Travel's techniques. Auditors can help to compute error metrics, analyze patterns, and suggest methods to reduce distortions. They may also uncover human factors contributing to persistent biases. Therefore, objective third-party input can improve the quality of planning at Uni Travel.

By using more diverse data (such as wider market indicators) can also reduce Uni Travel's over-reliance on its limited booking history. Incorporating regional tourism metrics, search trends, competitor information, consumer confidence metrics, and other external factors will help to improve the accuracy of projections. Furthermore, advanced analytics, such as regression analysis, can model relationships between additional variables and Uni Travel's past demand. Hopefully, the company will find resources to incorporate these advanced methods.

By monitoring early signals, company can identify emerging demand shifts. Web traffic, early booking changes, competitor price adjustments, travel intent surveys, and macroeconomic variables may help the company to see future changes before they occur. As a result, the company will have more opportunities to correct its course and increase its chances of success.

Finally, more advanced scenario modelling will help Uni Travel to account for uncertainties that were missed in its biased simplistic projections. Mapping best-case, moderate-case, and worst-case scenarios based on the available market data and team insights is great way to create emergency plans and find solutions to all potential problems before they even occur. For example, fuel costs may be modelled at historic lows, averages, and peaks. Stress testing across different scenarios will help Uni Travel to identify the most serious risks that require mitigation.

Overall, improving objectivity, expanding data inputs, and simulating alternatives will minimize the limitations that are constraining Uni Travel's current forecasting. While its small staff restricts complex modelling, adding basic statistical checks and monitoring

procedures will improve resilience significantly. Therefore, the company should consider the above-mentioned recommendations.

Enhancing budgeting and performance tracking

In addition to improving forecasting accuracy, applying better analytical techniques in the budgeting process will strengthen the company's financial performance. Currently, Uni Travel sets budgets based on financial data from prior periods and insights from workers. When deviations occur, the company does not have formal procedures for identifying the root causes of these deviations. Therefore, Uni Travel needs more analytical techniques to understand why there are such large variations in the projected vs. actual budgets. Statistical methods, like correlation analysis, regression modelling, and clustering algorithms, can help to understand correlations and patterns in financial data. These techniques are much more effective than basic year-on-year comparisons. Based on the results of these statistical analyses, the company can understand why changes occurred and how to address them.

Besides better diagnostics, the company has to include emergency finance reserves into its budgets in order to protect itself from risks. Uni Travel should also create clear policies to guide the use of these emergency resources. Reserves provide financial flexibility to handle unforeseen events without major disruption.

In my opinion, the company can also benefit from implementing automation into all of its analytic processes. Automation will allow Uni Travel to continuously monitor all of the major processes and metrics with limited staff. Basic rule-based algorithms can scan for anomalies in key financial ratios, which will indicate that there might be some emerging problems. Natural language processing applications can analyze customer feedback on social media and other platforms. Ideally, machine learning models that are trained on Uni Travel's historical financial data can identify new threats at early stages. However, most likely, the company will not reach such a high level of technological sophistication due to its limited resources and perceived lack of need for such technology. Nevertheless, simpler solutions, such as email/dashboard alerts on findings from automated analytics can help to keep track of the current situation and predict future changes.

Furthermore, Uni Travel should improve its performance management. More specifically, they need to revie their compensation and incentive structures to ensure that only positive behaviors are reinforced. While variable pay based on sales volumes encourages growth, it can also make employees prioritize immediate results over building long-term relationships with customers.

Enhancing analytics will enable Uni Travel to transition from reactive budgeting to proactive financial management. Statistical methods that were discussed earlier will help to identify the best scenarios that would drive performance. Automation via TOPO will allow the company to save a lot of resources because it will be able to create accurate forecasts with limited human resources. Overall, upgraded budgeting and monitoring practices will lead to better decisions and help Uni Travel mitigate emerging risks. Advanced analytical capabilities empower the company with accurate data and help it achieve higher growth, profitability and sustainability.

Cultivating analytical capabilities

Therefore, it would be logical to continue the discussion with the following question: How can the company develop stronger analytical capabilities? While we have already established that there is a need for such capabilities, it is necessary to examine the concrete ways to cultivate them. Here are some recommendations:

- Firstly, investing in user-friendly forecasting, budgeting, and business intelligence software (such as TOPO) is recommended to automate complex analytical processes beyond manual spreadsheets. However, there are other sophisticated tools, like Anaplan, Tagetik, and SAS, that can provide the company with intuitive data visualization and statistics without the need for deep expertise.

- Secondly, specialist analytics roles should be added to make sure that the company has internal technical skills to implement these tools. Data scientists and business analysts can be consulted to create job descriptions and attract the right talent. After hiring, this specialists should be able to handle machine learning applications. Beyond hiring, partnering with

analytics consulting firms on an ongoing basis can also be highly useful. However, developing core internal competencies is foundational.

Comprehensive training programs on analytical techniques and new tools will help the company to teach its employees. Both formal and on-the-job training are recommended. A new worker with technical competencies can attend conferences and certification courses to stay updated on the latest methodologies and software capabilities. Peer coaching and mentoring can also enable practical knowledge sharing between specialists and Uni Travel's new employee.

However, analytical education should not be limited to technical roles. Helping non-technical staff to understand TOPO's analytical outputs, recognize useful patterns, and apply insights is equally crucial. All employees collaborating in forecasting and planning should be knowledgeable in analytical concepts. They should also feel comfortable working with relevant tools. Such ongoing professional development will instill critical thinking and advanced problem-solving.

Over time, the goal is to cultivate a data-driven decision-making culture. This requires embedding analytics into all business processes through automation, training, and new platforms. With the right foundations, analytics can evolve from isolated expert tasks to fundamental drivers of strategy and operations. Upskilled staff will apply analytical mindsets continuously.

Developing robust analytical capabilities at Uni Travel requires investments in people, processes, and technology. However, all of these efforts and expenses will eventually unlock substantial value, far outweighing costs. The long-term benefits will be continuous improvement, risk management, and strategic flexibility that is powered by advanced analytics, such as TOPO.

Developing strategic insights

In addition to enhancing analytical procedures for forecasting and budgeting, it is important to train workers to derive strategic insights from data. This is critical for Uni Travel's growth and competitiveness. However, it will take time for employee to learn to use data and see patterns in it.

In the meantime, Uni Travel can collaborate with market research firms to generate insights that are cannot be produced inside the company. External experts can measure Uni Travel's performance on different metrics, such as market share, revenue growth, and brand sentiment. Then, these experts can compare all of these metrics with competitors. By identifying leading companies in each travel segment, Uni Travel will be able to improve its strategy. Another interesting approach is to analyze the technology that is used by competitors. Overall, there is a need for continuous market monitoring to keep track of competitors and their ideas.

Furthermore, the company should deepen its understanding of larger tourism industry trends, risks, and innovations. Partnerships with research agencies and trade associations to market data can be highly useful for strategy development. In addition, Uni Travel leadership can dedicate some time to read studies on consumer behaviors, macroeconomic conditions, policy changes, sustainability practices, and technology adoption in the tourism industry. Workshops and conferences can also help the company to update its industry knowledge.

With such market insights, Uni Travel can improve the quality of its scenario planning and develop more accurate models of potential futures. For example, the company can use TOPO to conduct Monte Carlo simulations in order to get an idea of how different variables, like oil prices, exchange rates, GDP growth, marketing costs, and competitor actions, can influence its performance and market share. Then, Uni Travel can create different mitigation strategies for various scenarios in order to improve its resilience. Moreover, models can be continuously refined as new data emerges.

Besides external scenarios, internal process simulations can help to identify weak areas. For example, a simulation can recreate the customer purchase journey, revealing some significant disadvantages, such as slow service and the lack of linguistic support in foreign countries. There are many other applications of such stimulations, starting from website functionality and ending with complex experiences of patients on different tours.

Advanced analysis of the customer data will help Uni Travel to uncover further insights to guide its strategy. Text and sentiment analysis of feedback surveys and social media content using natural language processing can provides valuable information about

the customers' behavior and preferences. These insights will help the company to create customized value propositions and personalization for each client.

Developing capabilities to continuously gather market data, model scenarios, simulate processes, and use advanced analytics will give Uni Travel a serious strategic advantage. Combining external best practices and emerging technologies with internal customer behavior data will reveal new growth opportunities. With scenarios prepared for uncertain futures, Uni Travel can be more confident in its flexibility and resilience in any situation.

In general, Uni Travel can address its weaknesses and improve economic planning effectiveness through focused initiatives across four areas:

1. Increasing the accuracy of demand forecasting by minimizing biases, expanding inputs, and stress testing scenarios. It will help to improve planning

2. Implementing automation into budgeting and monitoring will enable data-driven financial management.

3. Building internal analytical expertise, adopting advanced tools, and providing comprehensive training are also essential.

4. Finally, active efforts to gather market insights, simulate scenarios, and apply advanced analytics will stimulate innovation in Uni Travel.

While these solutions require investment, the end result will be improved planning, safeguarding Uni Travel's growth in the tourism industry. With accurate forecasting, advanced budgeting, internal technical talent, and market research feeding strategic planning, data-driven decision-making will become deeply implemented in Uni Travel's culture. In the contemporary business landscape, developing enterprise analytics capabilities is critical for survival and growth. For Uni Travel, closing the identified planning gaps through focused analytical upgrades will definitely lead to sustainable expansion.

3.2. Recommendations to enhance economic planning

Improve demand forecasting

Accurate demand forecasting is the foundation for effective strategic planning and financial management in the tourism industry. As the analysis revealed, Uni Travel's

current forecasting methodology has optimistic biases while lacking robust statistical validity. Therefore, upgrading their techniques is crucial to minimize distortions.

Firstly, exponential smoothing should be tested by applying different smoothing factors to booking history. This will help to adjust projections based on more recent data, which will be considered more heavily than past observations. Comparing various exponential smoothing models will help to identify the optimal one. The use of statistical performance metrics, including mean absolute percentage errors (MAPE), is essential, and it can be simplified through the use of TOPO, which already contains all formulas and calculations. All the company needs to do is to study this program and insert the relevant data.

In addition to exponential smoothing of past internal data, Uni Travel needs to expand the types of data it uses. Regional tourism arrival statistics, hotel occupancy rates, search dynamics, and other external indicators can help to better understand market conditions. Broader industry metrics will reveal major consumer demand shifts at early stages, giving company some time to prepare for them. Competitor monitoring is equally important. If other agencies rapidly adjust prices or package features, it may signify their advanced knowledge of some emerging trends. Furthermore, consumer confidence metrics can reflect clients' financial situation and willingness to spend on leisure trips. Therefore, by using all of this data, Uni Travel can make its planning processes more accurate and effective.

Advanced analytics can then process these diverse types of data to improve forecasting accuracy. Causal models may show exactly how much each additional marketing dollar spent by Uni Travel increases sales based on historical correlations. If a 10% advertising expansion drove a 5% booking increase, then similar things may happen again. The company can predict its future returns based on planned promotional budgets.

Additionally, sensitivity analysis should be conducted to understand changes in consumer demand for European tour packages more deeply. If the baseline forecast is $100,000 revenue, running +/-10% scenarios can help to check the company's strategic readiness to deal with unforeseen changes. Best-case scenario of $110,000 would enable upside revenue potential, while a 90,000 worst-case scenario can be addressed in a timely

manner through cost control. Creating such models can help Uni Travel to identify and mitigate its risks.

Implementing these exponential smoothing approaches, expanded data types, advanced analytics, and sensitivity simulations will make planning more objective and minimize biases. While this will require some resources at the initial stages, the improvements in forecast reliability will justify these investments and allow the company to gain data-driven insights. Still, human oversight remains essential in order to interpret data. Upgraded capability to predict trends in the tourism industry will help Uni Travel to deal with uncertainty.

Enhance budgeting accuracy

Tourism's is inherently a very volatile industry. However, in recent years, this volatility was further increased due to health and economic crises. In such complicate conditions, companies Uni Travel needs data-driven financial planning – not just relying on previous years' figures. By using statistical correlations, modelling the influence of external factors, and creating financial reserves, Uni Travel can transform reactive budgeting into resilient preparedness.

First and foremost, correlation analysis between historical revenues and costs can show some connections between financial metrics that cannot be found through traditional methods of analyzing profits and losses. For example, if past data shows that higher room bookings correlate strongly with increased restaurant spending by guests, the marketing team can use this insight when creating budgets. So, if projections show a 10% rise in room nights for next year, the restaurant revenue budget can also be increased by a connected percentage based on the historical relationship. Understanding this correlation between booking volume and restaurant spending allows better planning and budgeting.

Additionally, regression modeling can measure how much one metric impacts another. For example, analysis may find that every $100 spent on room bookings historically leads to $20 in restaurant revenue from guests. Using this insight, if 1000 more room nights are projected, budgets should be increased by $20,000 for dining

spending. Similarly, modeling outside factors like disposable income and fuel costs against past sales can reveal influences.

Moreover, predictive clustering algorithms which group similar past budget periods can determine whether 2023 has similar demand, margin, and expense patterns like in years 2010 and 2017, for example. If so, those years' finances can guide future planning. Combining time series modelling with external regressions and clustered historical pattern analysis can provides comprehensive insights for budgeting.

Next, Uni Travel should expand its contingency reserves. Setting aside 5-10% of budgets in accessible business savings funds can provides financial flexibility. Furthermore, the company should definition cases where it will be allowed to access these funds. For example, serious deviations in cash flows may require Uni Travel to use this money. Reserves require financial discipline, but they can serve as insurance against unpredictability in the volatile tourism industry.

Additionally, automated tools can scan budgets for sudden expense increases or profit drops, compared to past seasonal patterns. Combined, analytical modelling, protective reserves, and automation will provide objective insights to strengthen budgeting and reduce the company's reliance on inherently limited human intuition. The initial technical complexity will eventually bring benefits through enhanced long-term value. Such data-driven financial planning can prepare Uni Travel for external volatility and help it to take advantage of various revenue opportunities that appear from time to time in the tourism industry. While requiring investments, all of the above-mentioned tools justify their costs because they will make Uni Travel more resilient and .help the company take leadership in its region.

3.3. Financial feasibility of recommendations

Costs

Implementing the recommended analytical enhancements at Uni Travel will require certain financial investments. However, the long-term returns will outweigh these initial costs. This section evaluates budget estimates across three main areas: technologies, staffing, and training.

First of all it is important to calculate the cost of analytics software, data, and technologies. Developing and adopting a business intelligence platform, like TOPO, would likely cost $5,000-10,000 for a small business version, including implementation services. Ongoing annual fees would amount to nearly $300, covering updates/support. Cloud data storage and processing would cost somewhere between $50 to $500 annually depending on usage levels. Advanced analytics modules and add-ons may cost extra based on needed capabilities.

Purchasing additional datasets, such as regional tourism indicators, travel intent survey results, and macroeconomic variables, could cost $2,000-5,000 depending on breadth. Partnerships with review sites or search platforms may provide some behavioral data at no cost. Application programming interfaces (APIs) also enables accessing certain databases, but this method will require an IT specialist.

In total, the initial technology investment may reach $10,000-20,000 with ongoing annual expenses around $3,000. Options exist to start small and scale capabilities with time. Nevertheless, this project is worth it.

Next, it is necessary to calculate the cost of specialist staffing. Hiring one junior data analyst or business intelligence specialist with a bachelor's degree would cost approximately $12,000-24,000 in annual salary plus 20% for benefits. More qualified professionals with master's qualifications may earn closer to $30,000-40,000. Recruitment fees may also apply.

Alternatively, partnering with analytics consulting firms can provide flexible project-based services. However, developing some in-house competencies is recommended for sustainable enhancements. Overall, staffing contributes a major portion of analytical investments, but also leads to a significant positive impact.

Finally, we should consider the expenses for training programs. Analytics training for non-technical staff can be developed internally at low cost. External courses for technical hires can average $500-2,000 to build the necessary skills plus fees for certifications. Conferences may cost $100-300 per event. Subscriptions for online courses can amount to $500 each year. In total, budgeting approximately $3,000 per specialist for conferences, courses, and other expenses will enable continuous skills development.

Further coaching within the company can help it to create an analytical culture without significant expenses.

In summary, adopting analytics may cost Uni Travel around $30,000-50,000 initially with approximately $30,000 in annual recurring expenses. New technologies, staffing, data needs, and learning courses make up all of these expenses, which should considered in Uni Travels' yearly budgets. However, improving forecast reliability, financial preparedness, customer insights, and innovation through analytics will boost revenue, savings, and competitiveness over the long term. With discipline and patience, data-driven decision-making, which is powered by analytical investments, will repay all costs and provide major value.

Benefits

While building capabilities in analytics requires financial investment, adopting these technologies and techniques will deliver significant long-term benefits for Uni Travel across four key areas:

1. *More accurate demand forecasts*. By reducing mistakes through new modelling approaches, expanding data types, and stress-testing different scenarios, Uni Travel can achieve higher accuracy in predicting future customer volumes and revenues. For example, replacing intuitive estimates with exponential smoothing models may increase demand forecast precision by 10-20%. This will allow to properly manage the company's resources and operations.

2. *Optimized budgets*. Statistical methods, like correlation analysis, regression modeling, and clustering algorithms, give richer insights on historical financial patterns and connections to guide budgeting. Budget reserves can also provide security against market changes. Overall, analytics-based budgeting will help Uni Travel to avoid excessive spending, freeing up resources for growth investments and other needs.

3. *Earlier risk identification*. Automated monitoring for anomalies in ratios and performance metrics can provide alerts on emerging issues, like cash flow problems or low customer return rates. Addressing problems early before major

impacts happens will give Uni Travel more flexibility in its responses. There is no doubt that analytics improve organizational preparedness to negative events.

4. *Innovative growth opportunities.* Customer sentiment analysis, business process simulations, competitor evaluation, and other analytical techniques can reveal that there is some market potential for Uni Travel to grow. New trip offerings for high-value clients and personalized promotions can lead to additional revenues and profits for the company. Data-based insights can stimulate innovation and lead to impressive financial results.

In total, improving forecast reliability by even 10% can increase sales conversions and profitability over the long term. Budget optimization and risk preparedness also prevent revenue decreases. In this way, innovation opens new growth opportunities.

While adopting analytics requires some upfront costs, over a 5-year period, these technology and staffing investments can provide collective benefits that exceed $100,000 in added profitability, cost savings, and new revenue opportunities. With payback periods as short as 12-24 months, strengthening analytics will deliver major advantages. Therefore, despite some initial financial requirements, enhancing Uni Travel's analytical capabilities will generate far greater long-term returns. Turning data into insights can help the company to generate more value and, as a result, receive more profits.

Prioritization

With limited current capabilities and resources, Uni Travel must be selective and careful in adopting analytics. Prioritizing the most important initiatives first is crucial success. Over, here are some recommendations regarding the implement of analytics:

1. *Focus on highest impact initiatives first.* Conducting an initial assessment of the different solutions can help to understand the relative costs, benefits, and easiness of implementation. For example, while long-term machine learning applications may deliver tremendous insights, basic forecasting upgrades will offer quicker returns. Furthermore, it is easier to optimize budgets than map customer complete journey. Therefore, by comparing all of these initiates, Uni Travel can decide which ones should be prioritized. Additionally, the company can create a pilot project to analytics in just one business unit in order to

minimize risks. If the Europe packages team experiments with a new booking forecasting model and achieves a 5% sales increase, it can build further evidence for company-wide implementation. Thus, such focused piloting can be highly effective.

2. *Introduce new methods over some period of time, not at once.* Uni Travel should also plan larger initiatives in multiple, sequential stages by breaking them down into more manageable pieces. For instance, gaining new sources of external data is beneficial, but simply incorporating regional occupancy statistics can provide useful signals with less effort. More data can be added in the next phases. Similarly, it would be wise to hire one junior analytics specialist to start developing foundational capabilities during the first year. That worker will create the foundation that can be later improved by senior specialists. Speaking metaphorically, the company should walk before running.

Overall, one can conclude that careful prioritization and controlled pacing will allow Uni Travel to embrace analytical tools more safely. In such a way, the company will avoid overwhelming its limited resources and staff. It will also ensure that it will gain maximum benefits at each stage of its development.

Funding Sources

Depending on the available budget, Uni Travel can explore diverse financing options to fund analytical investments:

1. *Loans.* Business development loans through government small business agencies or major banks typically offer favorable 5-10 year repayment terms with 16-20% interest rates. The interest rate seem high, but given high inflation and the fact that Uni Travel receives income mostly in foreign currencies (U.S. dollar and euro), it is actually manageable.

2. *Grants.* As Uni Travel's analytical initiative will support tourism growth in the region, Ukrainian development agencies and industry association may offer grants that can finance up to 25-50% of analytical adoption expenses if they meet the requirements for sustainability or regional expansion.

3. *Partnership cost-sharing.* Partnerships could also be used to create common analytics projects. For example, a hotel chain may co-sponsor Uni Travel's regional demand modeling. Partners can gain insights while offsetting Uni Travel financing to cover its internal costs. This is an interesting arrangement but it requires the company to sell this idea to its partners, which can be very challenging.

In closing, Uni Travel should develop its analytical capabilities step-by-step, starting from the simplest applications. The long-term benefits from enhancing analytics justifies both patience and investment through loans, grants, or partnerships. The key is to maintain discipline to ensure that these innovations are implemented effectively over time without taking too much risk. Staying focused on these long-term returns will help Uni Travel to overcome all difficulties.

CONCLUSIONS

This bachelor's qualification work explored the important role of economic planning in enabling tourism companies to use resources more efficiently, manage costs, and maximize profits. As analyzed, the highly competitive and changing nature of the tourism industry, together with complex external factors, makes effective planning very challenging. Thus, it is important to examine these issues more deeply.

The theoretical research revealed that there are many quantitative forecasting models and qualitative techniques that can be applied for tourism planning. These techniques include time-series analyses to predict visitor volumes, scenario mapping to prepare for uncertainties, optimization algorithms to guide spending, and expert Delphi panels to gather additional insights. Findings showed that combining statistical projections with human judgement is the best approach to planning.

The case study of Uni Travel provided valuable practical insights. As a small agency, Uni Travel wants to become very responsive by making intuitive demand forecasts and budgeting. However, analysis showed that the company had optimistic biases and limitations in data inputs that undermined accuracy. Statistical tests revealed mean absolute errors around 9% in Uni Travel's demand projections. Expanding inputs and stress testing different scenarios would enhance objectivity. Similarly, tighter budgeting controls and reserves would improve financial stability.

Proposed solutions include the use of new analytical techniques alongside staff development and technology investments to improve planning. More accurate demand modelling, resilient budgeting, hiring data analysts, and partnerships were highlighted as the best options to improve the situation. Cost estimates showed that company will need $30,000-$50,000 initial investments with over $100,000 long-term profitability gains.

In closing, economic planning is crucial yet challenging for tourism companies. It requires blending art and science of data insights. As demonstrated by Uni Travel, even small firms have an opportunity to implement analytics. Advanced analytics, guided by human expertise, will allow sustainable growth despite industry complexity and constant changes in the external environment.

SUGGESTIONS

To improving its economic planning, Uni Travel should implement analytical capabilities step-by-step over the next 3 years. The first stage should include forecasting and budgeting upgrades. After that, the company should add new types of market data and simulations.

In Year 1, statistical smoothing and sensitivity testing should be included into demand forecasts while correlation techniques should be used to make budgets more accurate. Hiring an entry-level data analyst would help to make these improvements easier. During Year 2, the company should expand external tourism indicators and introduce optimization algorithms to support its pricing decisions. If bookings increase by over 5% during these first phases, more advanced machine learning applications could be piloted during Year 3, if the company will have the resources and desire to further refine its planning practices.

Staff training in analytical tools and techniques is essential as well. Exploring partnerships that can provide useful data may help to gather more information about customers to strengthen innovation. Small innovative tasks can engage Uni Travel's employees and encourage them to apply analytical thinking during planning.

Despite being implemented in 3 phases, these enhancements require $30,000-$50,000 startup costs, including licensing, cloud services, and an analyst. However, long-term profit gains may exceed $100,000 over 3 years. They will justify investments and the company's boost resilience. With upgrades implemented incrementally, Uni Travel can improve planning while balancing practicality with great innovation potential. The company has a bright path ahead. All they have to do at this point is to embrace technological progress and open their minds to the immense opportunities that can be provided by data-driven planning.

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ANNEXES

Annex A

```python
import pandas as pd

import matplotlib.pyplot as plt


def load_data(actual_file, forecast_file):

    actual_data = pd.read_csv(actual_file)

    forecast_data = pd.read_csv(forecast_file)

    return actual_data, forecast_data


def plot_accuracy(actual_data, forecast_data):

    plt.plot(actual_data['Month'], actual_data['Actual Demand'], label='Actual Demand',
marker='o')

    plt.plot(forecast_data['Month'], forecast_data['Forecasted Demand'],
label='Forecasted Demand', marker='x')

    plt.xlabel('Month')

    plt.ylabel('Demand')

    plt.title('Actual vs Forecasted Demand for 2023')

    plt.legend()

    plt.xticks(rotation=45)

    plt.grid(True)

    plt.show()


def calculate_accuracy(actual_data, forecast_data):

    merged_data = pd.merge(actual_data, forecast_data, on='Month')

    merged_data['Error'] = merged_data['Actual Demand'] - merged_data['Forecasted
Demand']

    merged_data['Absolute Error'] = abs(merged_data['Error'])

    mean_absolute_error = merged_data['Absolute Error'].mean()

    return mean_absolute_error
```

```python
def main():
    actual_file = 'actual_demand_2023.csv'
    forecast_file = 'forecast_demand_2023.csv'

    actual_data, forecast_data = load_data(actual_file, forecast_file)
    plot_accuracy(actual_data, forecast_data)

    mean_absolute_error = calculate_accuracy(actual_data, forecast_data)
    print(f"Mean Absolute Error: {mean_absolute_error}")

if __name__ == "__main__":
    main()
```

Annex B

Assets	Year 1	Year 2	Year 3
Cash	350,000 UAH	420,000 UAH	490,000 UAH
Accounts Receivable	210,000 UAH	280,000 UAH	350,000 UAH
Inventory	140,000 UAH	175,000 UAH	210,000 UAH
Total Current Assets	700,000 UAH	875,000 UAH	1,050,000 UAH
Property, Plant, and Equipment	350,000 UAH	385,000 UAH	420,000 UAH
Total Assets	1,050,000 UAH	1,260,000 UAH	1,470,000 UAH
Liabilities			
Accounts Payable	105,000 UAH	126,000 UAH	154,000 UAH
Short-Term Debt	35,000 UAH	42,000 UAH	49,000 UAH
Total Current Liabilities	140,000 UAH	168,000 UAH	203,000 UAH
Long-Term Debt	210,000 UAH	196,000 UAH	175,000 UAH
Total Liabilities	350,000 UAH	364,000 UAH	378,000 UAH
Equity			
Retained Earnings	350,000 UAH	532,000 UAH	882,000 UAH
Total Equity	700,000 UAH	896,000 UAH	1,092,000 UAH