

1 OCT 2024

THALES

Enhancing In-Flight Entertainment (IFE) Systems: A User-Centric Approach

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Global leader in aerospace, defense, and digital security.
Provides In-Flight Entertainment (IFE) systems for airline.

Specific Areas Explored

- User experience of current IFE systems
- Content personalization and organization
- Challenges faced by different user demographics
- Opportunities for enhancing passenger engagement



EVOLUTION OF IFE

1921

In Flight Movies

1990

Digital Touchscreens

2024

Wireless IFE, BYOD, high-speed connectivity, 4K OLED displays

FUTURE TRENDS

8K displays, AI-driven recommendations, VR/AR experiences

Emerging Trends

- Hyper-personalization of content
- Seamless device-to-IFE connectivity
- Seat-integrated technologies (wireless charging, climate control)
- Enhanced accessibility features
- Integration of e-commerce and duty-free shopping



SECONDARY RESEARCH ACTIVITIES AND RESOURCES

PROCESS

- Literature review on IFE systems + user experience
- Analysis of industry reports and market trends
- Examination of existing IFE solutions and their features

RESOURCES UTILIZED

- Academic databases and journals
- Industry publications and white papers
- Airline websites and product specifications
- Stakeholder interviews



ANALYSIS

- Comparative analysis of IFE systems
- Content analysis of user reviews and feedback
- SWOT analysis of current IFE offerings

UNDERSTANDING

- Passengers desire an IFE experience that enhances their journey through personalizing it based on the type of experience they want to have: calming, fun, entertained, etc
- Can lead to personalization in cultural media, varying interactive activity, etc

Secondary Research Distilled Information

Key Findings

- Current IFE systems **lack personalization**, leading to user dissatisfaction
- Passengers increasingly **rely on personal devices** for entertainment
- Different user demographics have **varying needs** and preferences
- **Accessibility** is a major concern, especially for elderly users
- Integration of **interactive and social features** could increase engagement
- **Content discovery and navigation** are common pain points

Impact On Our Primary Research

- These discoveries steered our primary research towards a deeper focus on user experience, personalized interactions, and the unique needs of different demographics in IFE systems.



Primary Research and Resources

RESEARCH PROCESS

1. Identify interview population groups
2. Define psychographic profiles
3. Establish interview objectives
4. Draft interview questions for reference
5. Make interview plans and reach out to people
6. Conduct interview



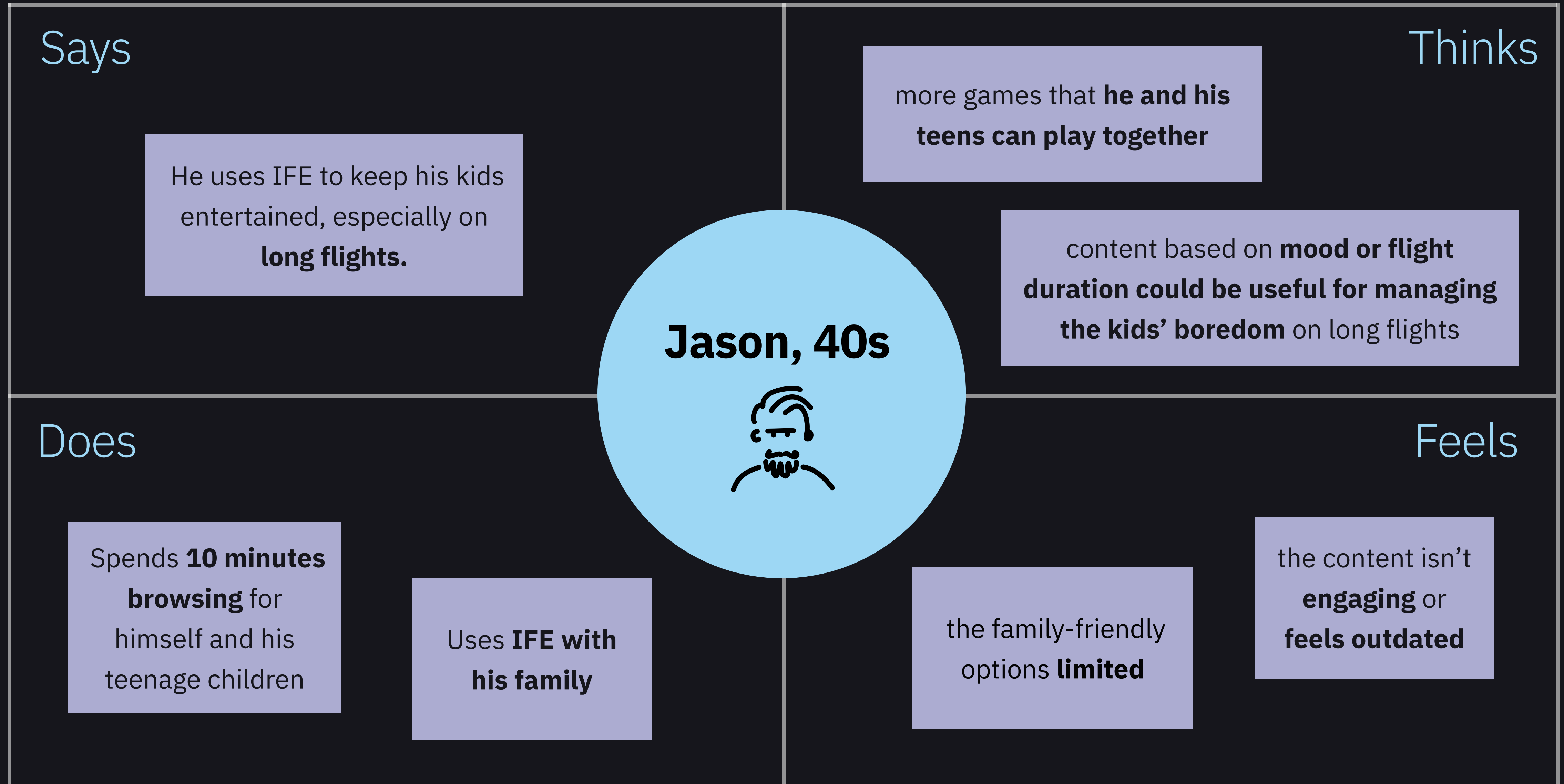
SAMPLE INTERVIEW QUESTIONS

- How often do you use in-flight entertainment systems? What types of content do you usually engage with?
- How long do you typically spend browsing for something to watch or play?
- Have you ever felt frustrated while using IFE? If so, why?

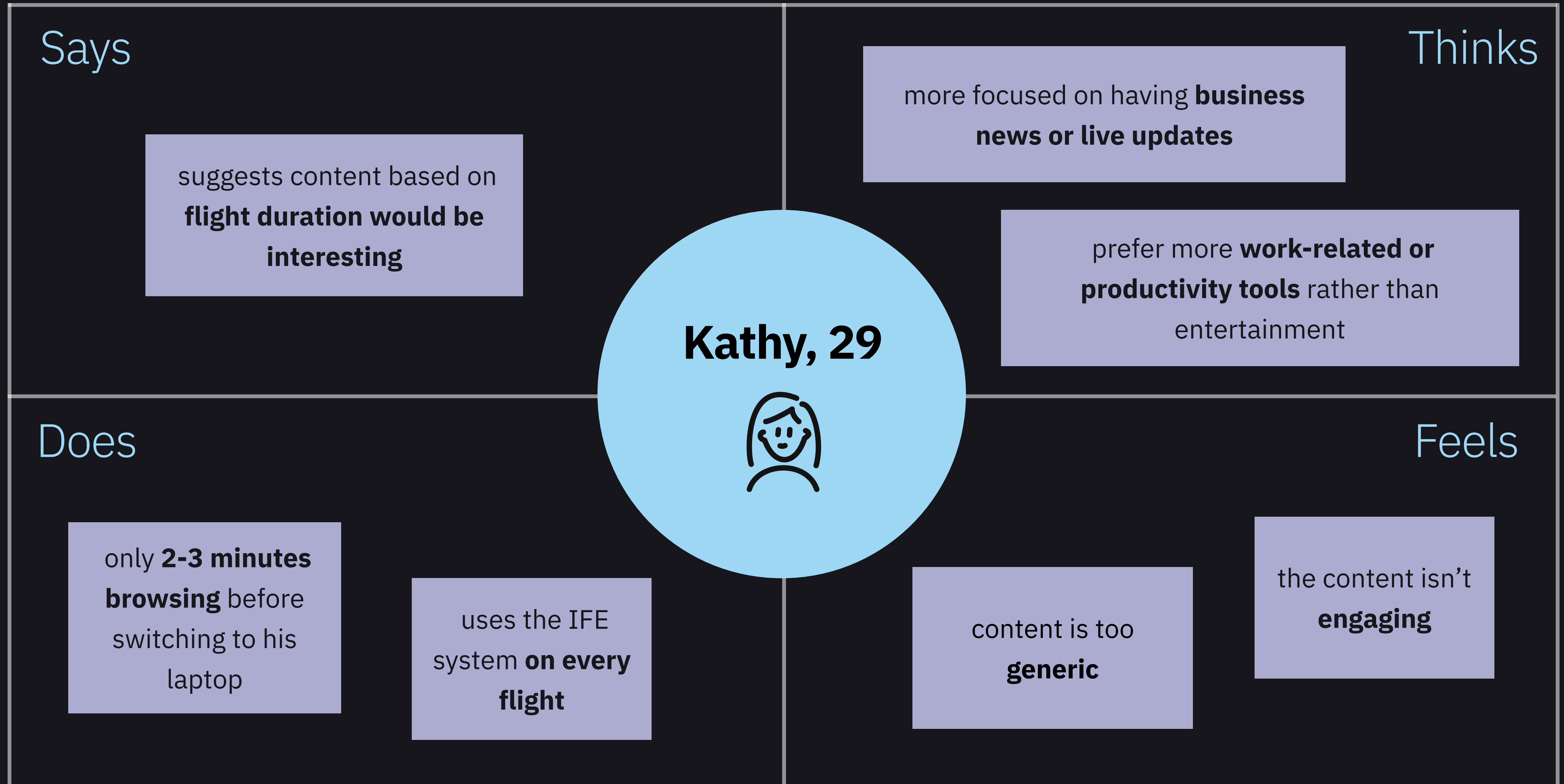
ANALYSIS TECHNIQUES

- | | | |
|--|---|--|
| • Thematic analysis of interview responses | → | Identify common pain points and preferences |
| • Correlation Analysis | → | Reveals relationships between variables |
| • Persona Creation | → | Builds user profiles to address specific needs |

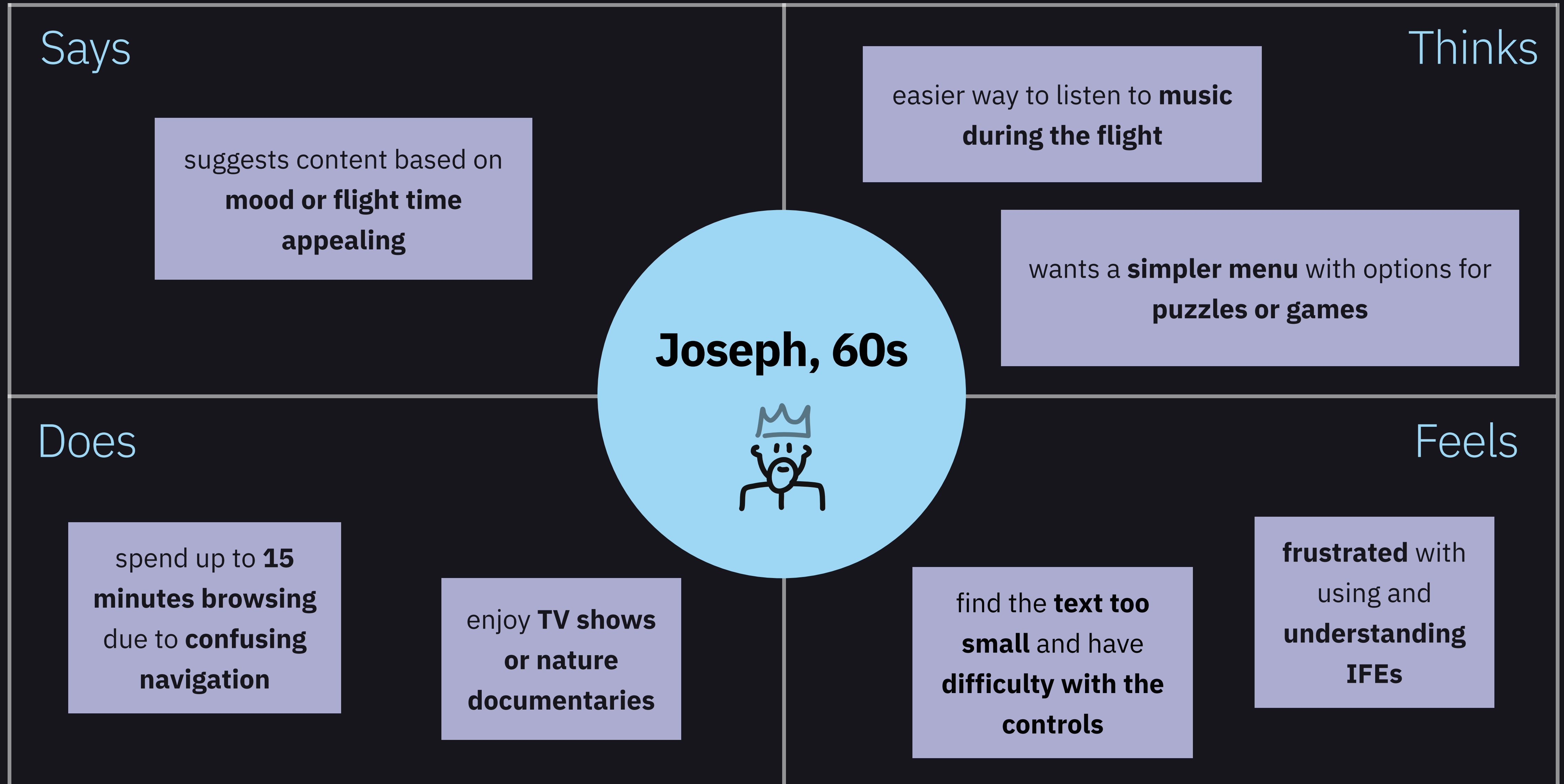
EMPATHY MAP



EMPATHY MAP



EMPATHY MAP



PRIMARY RESEARCH FINDINGS

Elderly users find IFE systems complicated and prefer using personal devices



Parents desire more family-friendly options and better organization



Students and younger users desire more interactive content and social features



Business travelers prioritize productivity tools and quick access to content



Impact on Problem Definition

These findings gave us more specifics to focus on, especially when considering how to tailor solutions for different types of passengers and addressing the usability and content variety concerns.

REDEFINED PROBLEM DEFINITION

KEY STAKEHOLDERS

Diverse passenger groups:

- Business Travelers
- Families
- Elderly
- Students
- Leisure Travelers



IDENTIFIED OBSTACLES

- **One-size-fits-all approach** to content presentation
- **Poor user interface design** and accessibility
- **Limited integration** with personal devices and preferences



STAKEHOLDER EXPERIENCES

- **Difficulty** in finding relevant content
- **Frustration** with complex navigation and technical issues
- **Lack of personalization** and limited content variety



STAKEHOLDER MINDSET

Passengers desire an intuitive, personalized, and engaging IFE experience that enhances their journey



INITIAL THEMATIC AREAS

Initial Recommendations

- **Implement AI-driven personalization** for content recommendations
- **Redesign user interface** for improved accessibility and navigation
- **Integrate social and interactive features** to enhance engagement
- **Develop seamless integration** with personal devices

Themes to Explore

- **User-centric design principles** for diverse demographics
- **Adaptive content curation** based on flight duration and user preferences
- **Gamification and social connectivity** in IFE systems
- **Accessibility features** for elderly and differently-abled passengers

Next Steps

- **Conduct user testing** with prototype designs
- **Explore technical feasibility** of proposed solutions
- **Engage with airlines** to understand implementation challenges
- **Develop a roadmap** for phased implementation of improvements



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Thank You
Q&A