BUSA6430/3430: Business Applications of AI

S1 2025

Week 4: AI-enabled Business Models

Week 4 agenda

Part 1: Week 4 quiz

Part 2: Preparation for Assignment 1

       - Walk-through

       - Q & A

Part 3: Topic 4: AI-enabled Business Models (Business Model Canvas)

Week 4 topic overview

At the end of this topic you will:

- Develop an understanding of different elements of a business models
- Learn to apply Business Model Canvas framework to analyse AI applications across different elements of <u>any</u> business model in <u>any</u> context
- Build the necessary foundations to start working on your assignment 1

AI in Today's world
BENEFITS (VALUE PROPOSITIONS) OF AI

- Increased efficiency

- Increased productivity

- Improved decision-making

- Better use of employees' skills and talents

- Empowerment of people in workplaces and society

- Creation of new products and services

- Innovation

- Improved safety of humans (in some contexts)

- Improved health and wellbeing (in some contexts)

- New employment opportunities

- Fairness and equity (in some contexts)

- & ....more benefits emerging

IMPORTANT Question: How are these value propositions created?
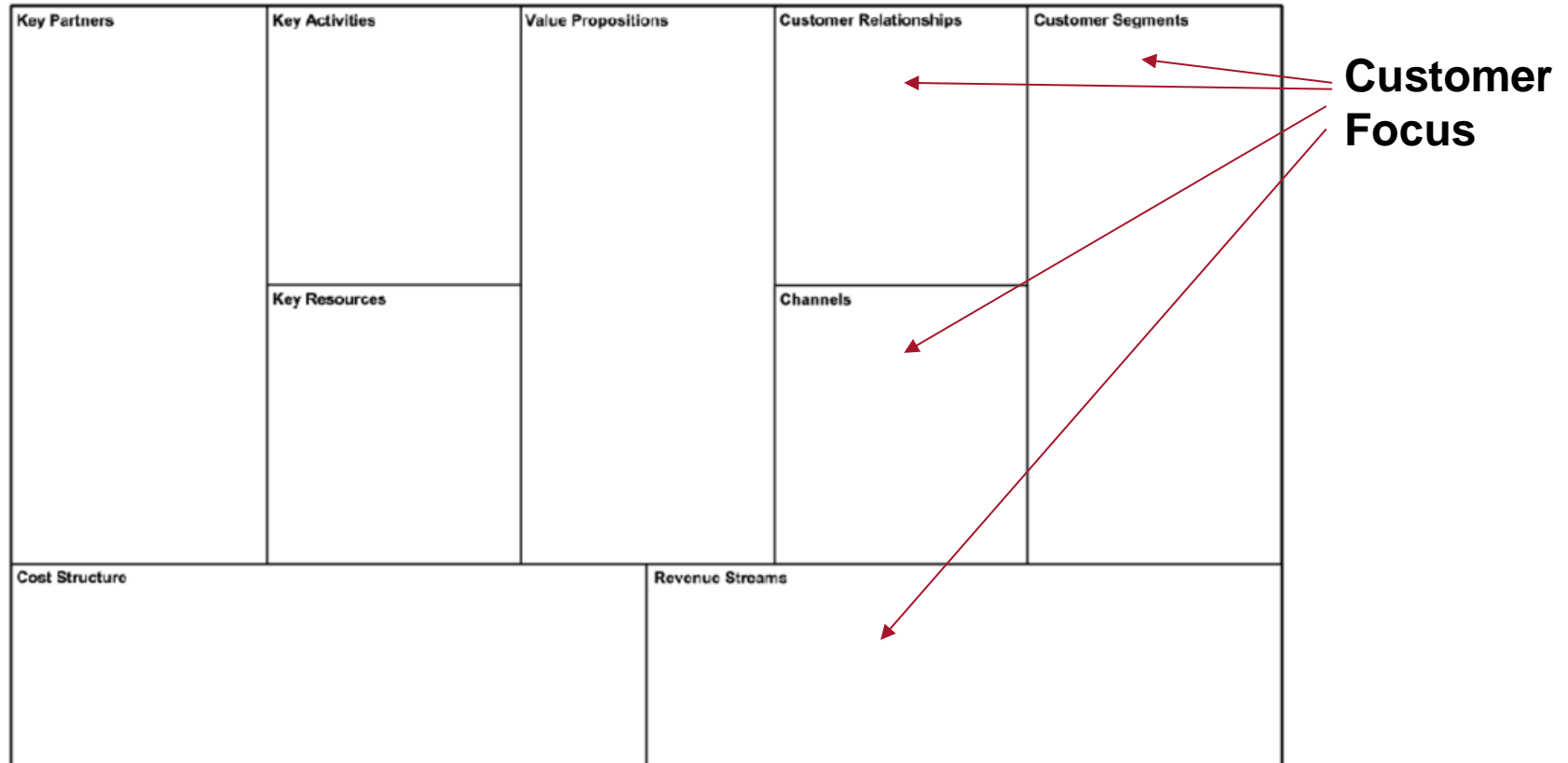
Business Model Canvas (BMC)

BMC is:

- strategic management tool

- business design tool

- business analysis tool

- "thinking tool"

- Innovation tool

- knowledge sharing tool

— It provides a holistic view of a business on a single page.

The essence: The BMC enables people and businesses to design, visualise, analyse, innovate and communicate their business models effectively to different audiences.
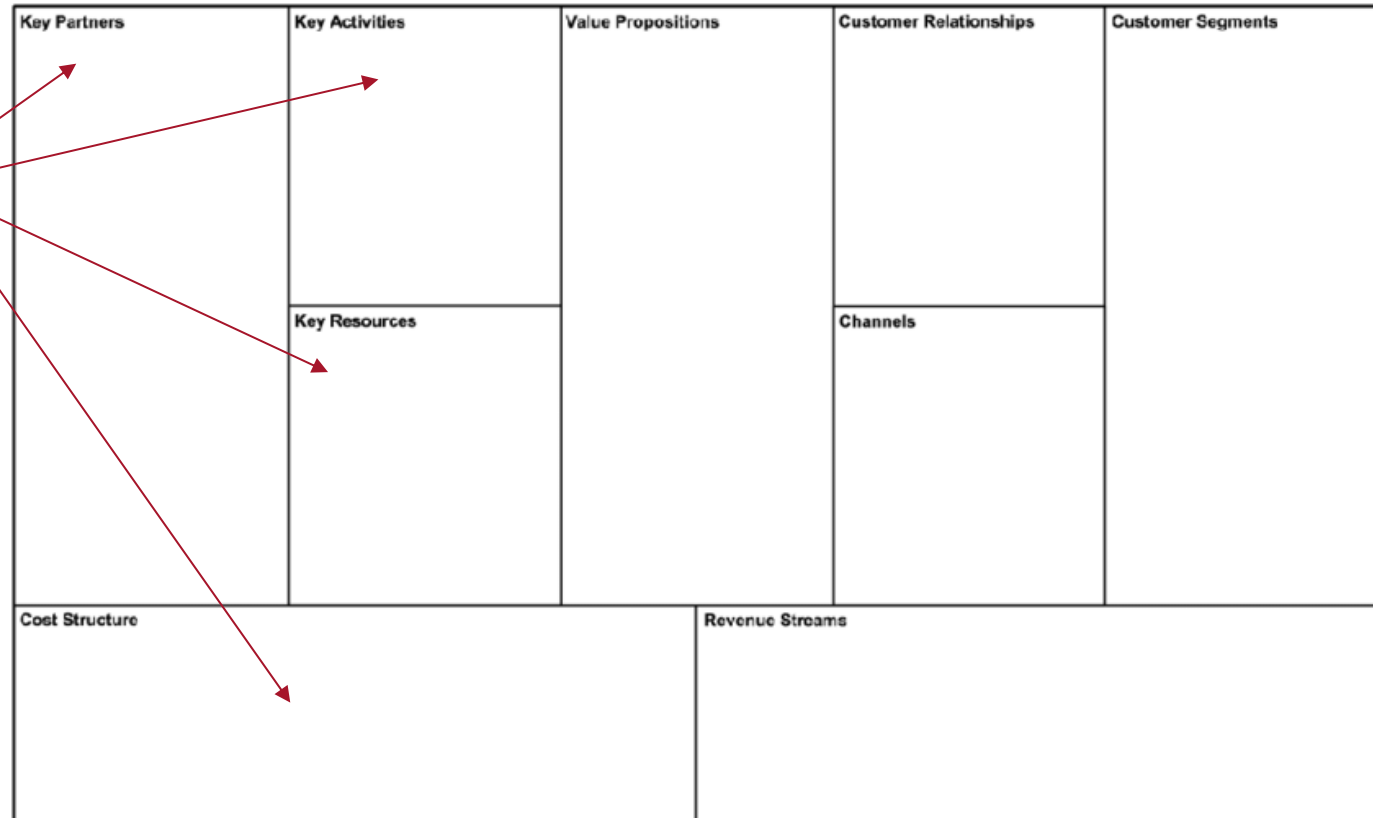
Benefits of Using BMC:

- **Concise Overview**:
  - Replaces lengthy business plans with a one-page snapshot.
- **Collaboration**:
  - Facilitates team alignment and understanding.
- **Iterative Design**:
  - Allows testing and refining business models
- **Visual thinking & sense-making:**
  - Stimulates visual sense-making and creativity
- **Simple and Intuitive:**
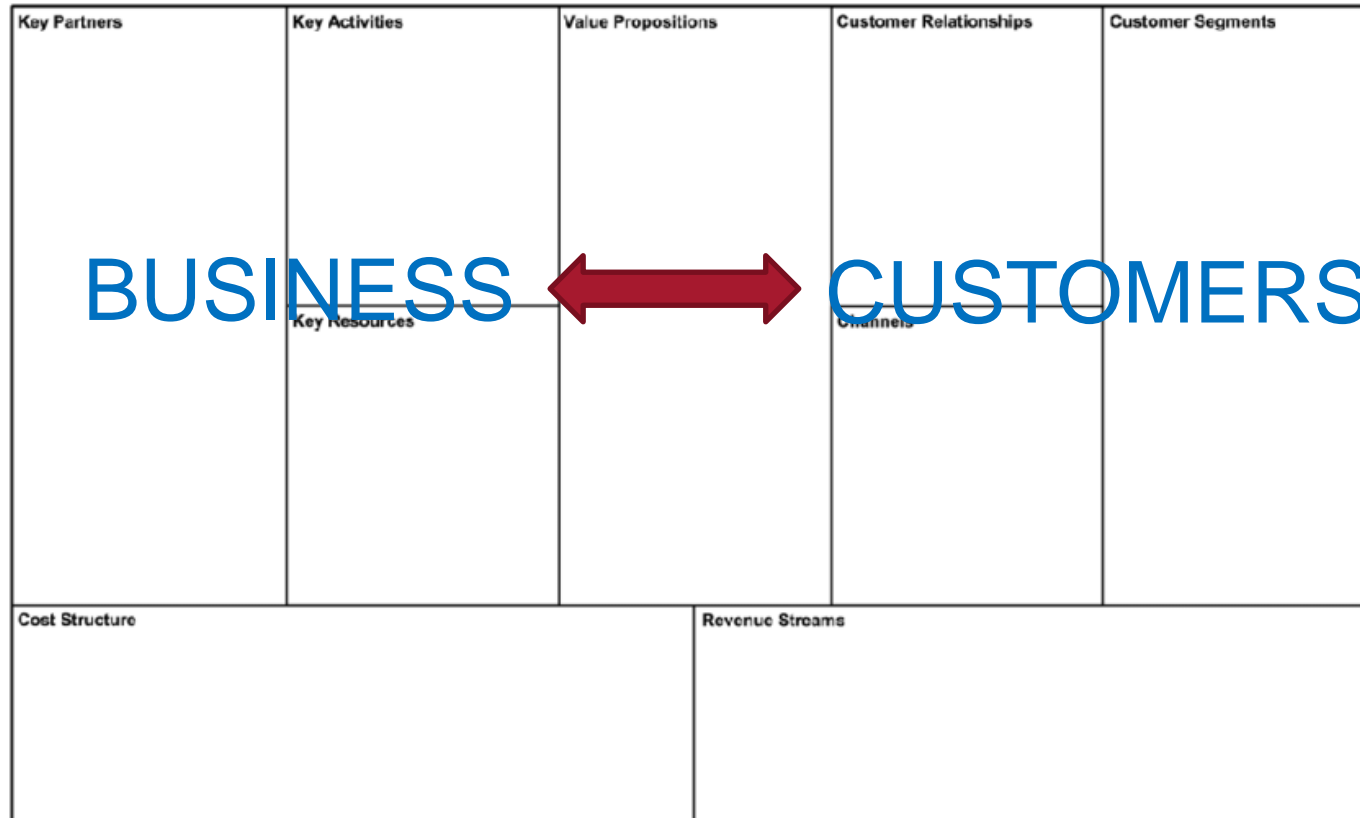 - Easy to learn and apply in any context

Business Model Canvas

Source: BMC by Osterwalder et al. (2010)

Business Model Canvas

Source: BMC by Osterwalder et al. (2010)

Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	BUSINESS ⟷ CUSTOMERS			
	Key Resources		Channels	
Cost Structure			Revenue Streams	

Osterwalder's explanation of BMC

Source: BMC by Osterwalder et al. (2010)

Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Identify external partners (e.g., suppliers, alliances) to enhance operations.	Outline essential tasks (e.g., production, marketing) to deliver value.	Define what unique value your business offers to customers.	Describe strategies for acquiring, retaining, and engaging customers.	Identify your target customers (e.g., demographics, needs).
	Key Resources List critical resources: tangible, intangible, human		**Channels** Determine how you'll reach and deliver value to customers (e.g., online, retail).	

Cost Structure	Revenue Streams
Detail fixed and variable costs (e.g., production, marketing, overhead).	Specify how your business generates income (e.g., sales, subscriptions).

Source: BMC by Osterwalder et al. (2010)

Key Partners

- Partners
- Suppliers
- Resources you use from partners
- Activities performed by partners

Key Activities

- Activities required by your value propositions
- Geographies
- Client relationships
- Revenue streams

Key Resources

- Resources required by your value propositions
- Distribution channels
- Customer relationships
- Revenue streams

Value Propositions

- What value do you deliver to your customer?
- Customer problems you are helping to solve
- Services offered
- Customer needs you are satisfying

Characteristics

- Newness
- Performance
- Customisation
- Getting the job done
- Brand / status
- Price / cost reduction
- Risk reduction
- Accessibility
- Convenience / usability

Customer Relationships

- Expected customer - client relationships
- Which are established?
- How do they fit with the rest of your business model?
- How costly are they?

Channels

- Which channels are your customer using?
- Which do they want to communicate with you on?
- How best to reach them?
- Which are cost effective?

Customer Segments

- How many groups do your different types of customers fit into?
- Who are you creating value for?
- Who are your most important customers?

Cost Structure

- Key costs in your business model
- Most costly key resources
- Most costly key activities

Revenue Streams

- What do customers most value?
- What are they willing to pay?
- What are they currently paying?
- How are they currently paying?
- How would they like to pay?
- How much does each revenue stream contribute to your overall revenue?

Source: BMC by Osterwalder et al. (2010)

Let's have a go!

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	Key Resources		**Channels**	

Cost Structure	Revenue Streams

Choose any business you are familiar with and let's analyse it.

Let's look at different case studies

- [Nespreso's Business Model Canvas](#)

Case study: Spotify BMC (key aspects)

- **Customer Segments**:
  - **Free Users**: Ad-supported listeners.
  - **Premium Subscribers**: Paying for an ad-free experience.
  - **Advertisers:** Providing ad-services
- **Value Propositions**:
  - **Free users/subscribers:**
    - **Vast Music Library**: Access to millions of songs, podcasts, and videos.
    - **Personalized Recommendations**: Curated playlists and discovery features.
    - **Convenience**: Anytime, anywhere streaming
    - **Instant Access**: on demand, instant access to music
  - **Advertisers:**
    - Very effective advertising platform

Case study: Spotify BMC

- **Channels**:
  - **Mobile App**: Main platform for user engagement.
  - **Web Player**: Access via browsers.
- **Customer Relationships**:
  - **Self-Service**: Users manage their accounts.
  - **Community**: Engaging with other users.
  - **Support**: Customer service for inquiries.

Case study: Spotify BMC

- **Revenue Streams**:
  - **Advertisements**: Revenue from ads played during free listening.
  - **Premium Subscriptions**: Monthly fees for an ad-free experience.
- **Key Resources**:
  - **Music Catalogue**: Extensive library of licensed content.
  - **Technology Infrastructure**: Servers, algorithms, platform and data centres.
  - **Brand Reputation**: Trust and recognition.
- **Key Activities**:
  - **Content Licensing**: Negotiating with record labels and artists.
  - **Provision of IT services**
  - **Algorithm Development**: Personalization and recommendation engines.
  - **User Experience Provision & Enhancement**: App updates and features.
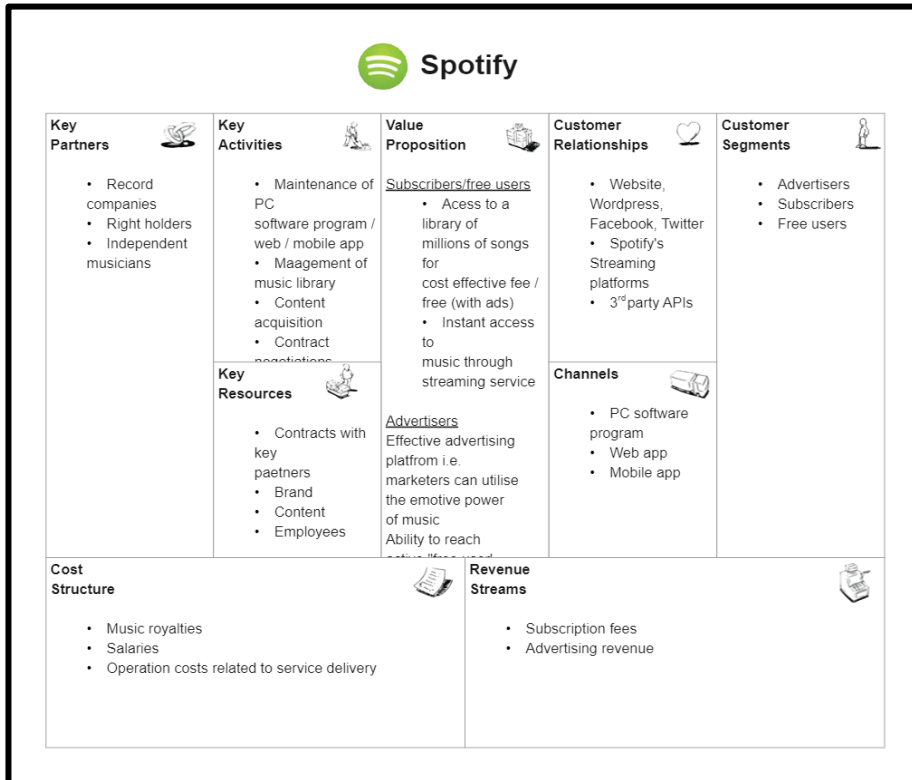 - **Partnership management:** Partners, advertisers,

Case study: Spotify BMC

- **Key Partners**:
  - **Record Labels**: Content providers.
  - **Device Manufacturers**: Integration with hardware.
  - **Telecom Companies**: Bundled subscriptions.
- **Cost Structure**:
  - **Content Licensing Costs**: Paying royalties to artists.
  - **Technology Maintenance**: Servers, bandwidth, and app development.
  - **Marketing and Promotion**: Attracting and retaining users.

Spotify — Business Model Canvas

Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
• Record companies • Right holders • Independent musicians	• Maintenance of PC software program / web / mobile app • Maagement of music library • Content acquisition • Contract negotiations	Subscribers/free users • Acess to a library of millions of songs for cost effective fee / free (with ads) • Instant access to music through streaming service Advertisers Effective advertising platfrom i.e. marketers can utilise the emotive power of music Ability to reach active "free user"	• Website, Wordpress, Facebook, Twitter • Spotify's Streaming platforms • 3rd party APIs	• Advertisers • Subscribers • Free users
	Key Resources		Channels	
	• Contracts with key paetners • Brand • Content • Employees		• PC software program • Web app • Mobile app	

Cost Structure	Revenue Streams
• Music royalties • Salaries • Operation costs related to service delivery	• Subscription fees • Advertising revenue

Source: BMC by Osterwalde et al.

# Spotify BMC: Mapping different AI applications

Spotify AI DJ:
- Acts as an AI-powered disc jockey, curating personalised music selections for users based on their unique music tastes and listening behavior.
- The AI DJ adapts in real-time, switching songs and vibes based on user feedback.
- It finds music that users haven't listened to in awhile or suggests new selections aligned with their preferences

Source: How Spotify Uses AI (And What You Can Learn from It)

# Spotify BMC: Mapping different AI applications
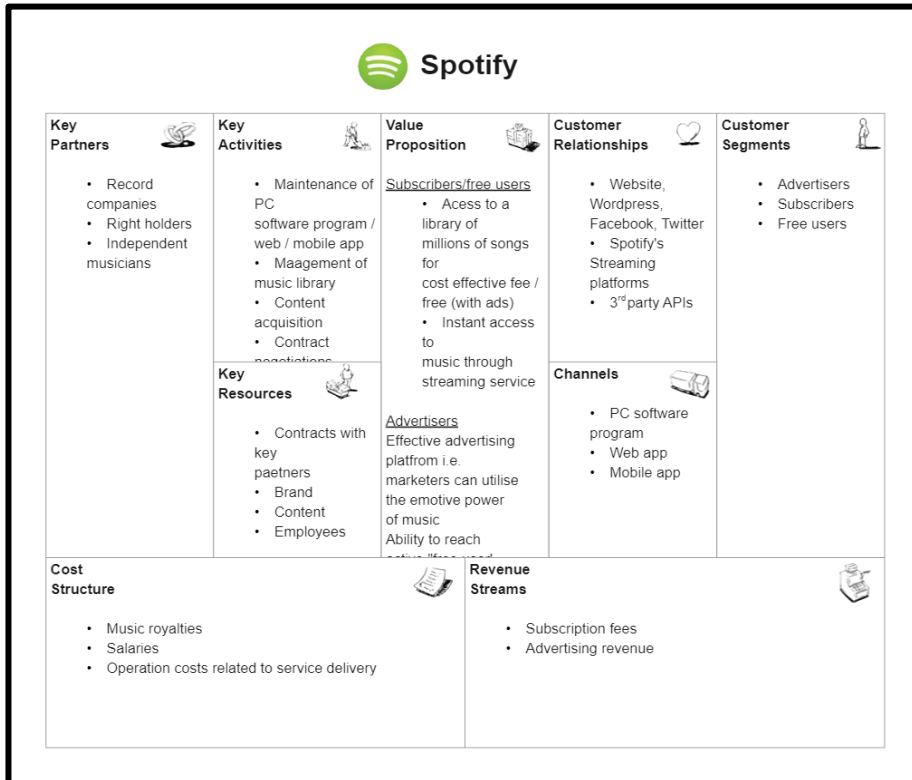
Discover Weekly:
- Every Monday, Spotify's AI algorithms create a unique playlist for each user.
- These playlists consist of 30 songs carefully chosen based on the user's streaming history, added songs, and likes/dislikes.
- It's a powerful tool for introducing listeners to new music and artists, encouraging exploration beyond their usual favorites

Source: How Spotify Uses AI (And What You Can Learn from It)

Spotify BMC: Mapping different AI applications
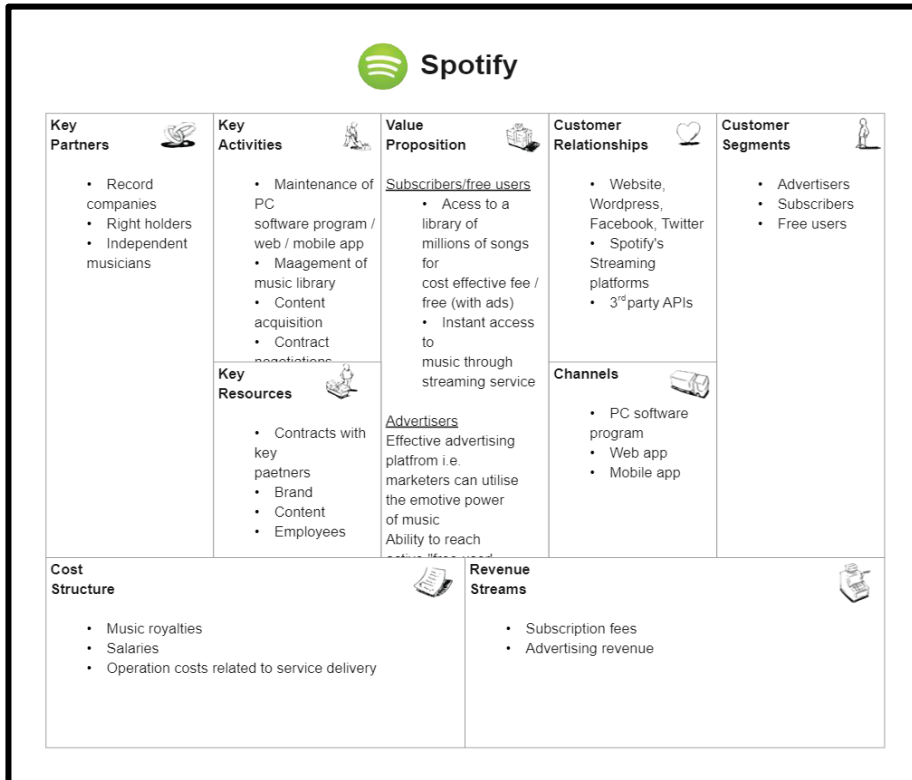
Spotify Wrapped
- At the end of each year, users receive a personalized summary of their listening patterns.
- It highlights frequently played artists, songs, albums, and podcasts, along with stats on total listening minutes and favorite genres.
- Spotify even curates a playlist featuring the user's top 100 tracks from the past year

Source: How Spotify Uses AI (And What You Can Learn from It)

Spotify BMC: Mapping different AI applications
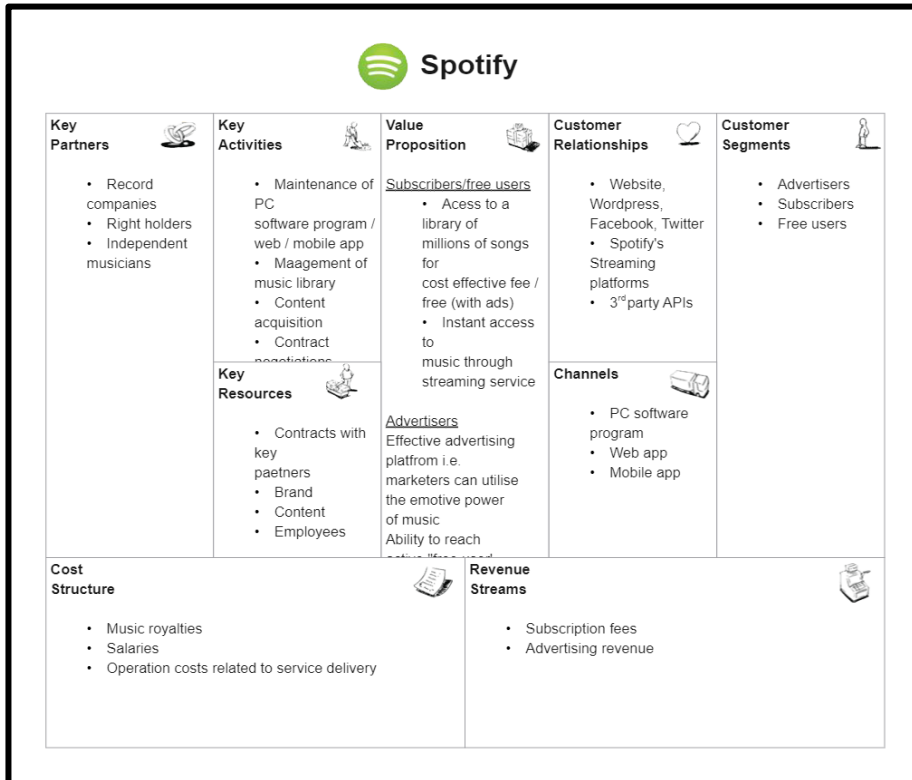
AI-Driven Recommendations and Playlists:

- Spotify's AI analyzes vast amounts of data, including user listening habits, preferences, and contextual information.
- It delivers personalized recommendations and curated playlists.
- By understanding user behavior, Spotify tailors the music streaming experience, keeping listeners engaged and satisfied[4]

Spotify AI Tools: Basic Pitch, Enhance, and More - AudioCipher

Spotify BMC: Mapping different AI applications
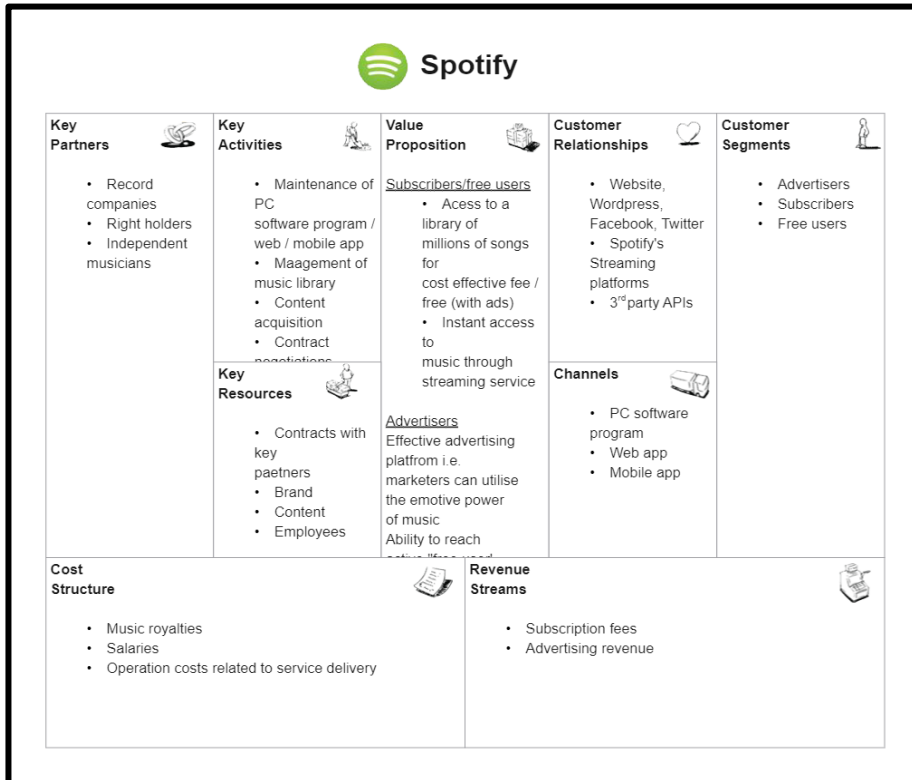
Content Cataloging and Search:
- AI helps extract audio content-rich signals from songs for cataloging.
- It enhances search capabilities, making it easier for users to find specific tracks, artists, or genres
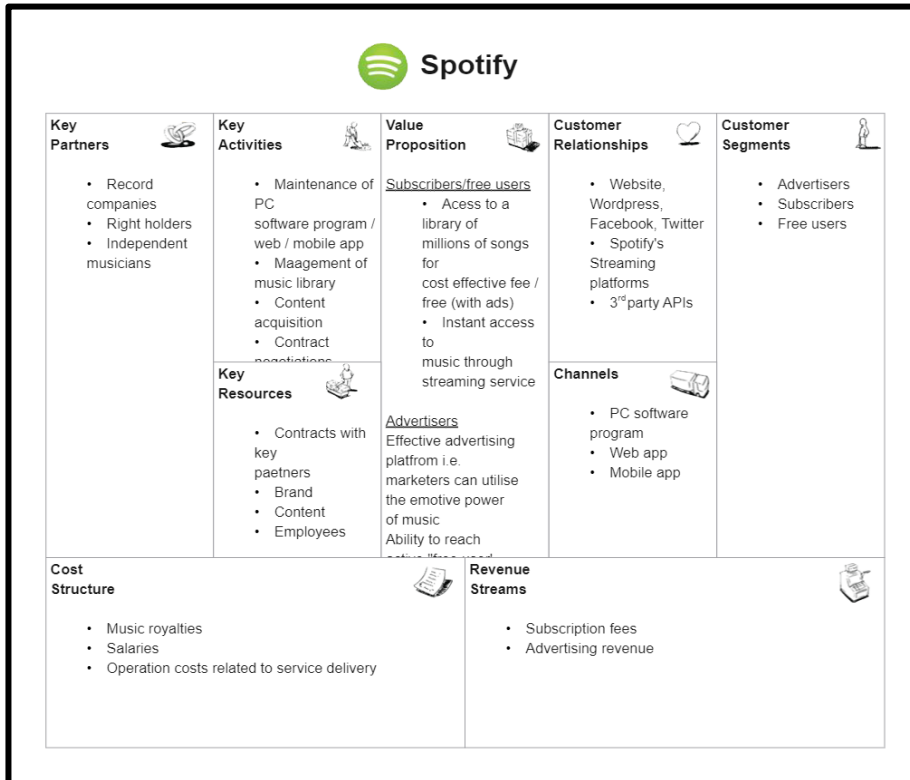
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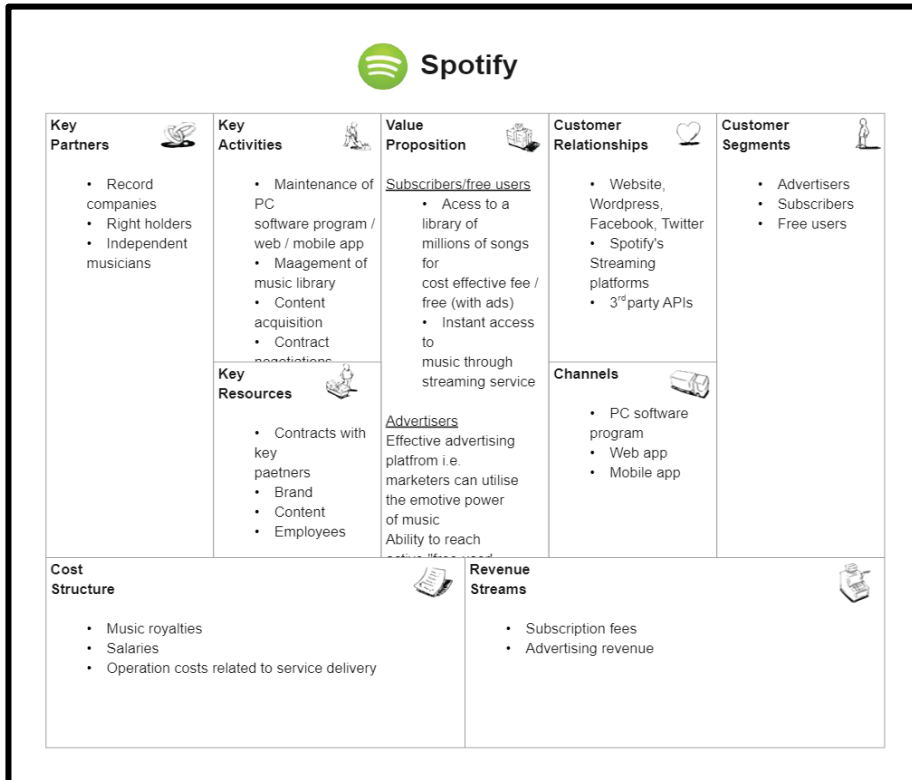
Business metrics & optimisation of operations
- Spotify employs AI to develop business metrics and optimization algorithms.
- These algorithms enhance operational efficiency and drive strategic decisions

Spotify BMC: Mapping different AI applications

AI-Assisted Music Creation:

- Spotify explores AI tools for creating music.
While not directly visible to users, AI assists in generating music, experimenting with new sounds, and pushing creative boundaries

AI And Spotify A New Approach To Growing Your Music Channel

Pause & reflect

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	Key Resources		**Channels**	

Cost Structure	Revenue Streams

Where would you place data? AI technology? Business processes?

Limitations of BMC

- Strategy is not considered (explicitly)
- Environment is not considered
- Business Model is a snapshot in time
- BMC is used as static instead of 'living document'
- BCM is a framework rather than a prescriptive model

Week 4 overview

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