



Cours 2:

Prospecting, Advertising & Protecting Your Assets

Navigating the Online Marketplace

Digital Economy & Strategic Watch - 3rd Year CS (ISIL/SI)

MI Faculty - Computer Science Department

1- What is Electronic Prospecting?

Electronic Prospecting: The Digital Gold Rush

Definition



Systematic process of **identifying and qualifying** potential customers online

Analogy



Not casting a wide net, but using a **sophisticated metal detector** to find specific, valuable treasure

Goal



Build a list of **"leads"** – people who have shown interest and could become customers

Example



A cybersecurity startup uses **LinkedIn** to find and connect with IT managers in the banking sector



The Digital Prospector's Toolkit

Modern Prospecting Tools & Techniques



Social Listening

Monitoring social media for **brand mentions**, keywords, and competitor discussions

Tools: **Brandwatch**, Hootsuite Insights



SEO

Making your website **visible** to people actively searching for your solutions

Example: A Marrakech riad owner optimizes their site for "best traditional stay in Marrakech"



Lead Magnets

Offering **free value** (e-book, webinar, tool) in exchange for contact info

Example: HubSpot offers free marketing course in exchange for your email



Web Analytics

Using data to understand **who is visiting** your site and what they're interested in

Tool: **Google Analytics**

From Mass Media to Mass Personalization

Digital Advertising: The Megaphone with a Laser Pointer



Definition

Promoting products/services using **digital channels**



Key Difference

Unlike a billboard (**megaphone**), digital ads can target a specific person (**laser pointer**)



Core Principle

The right message, to **the right person**, at **the right time**

Visual Comparison



Traditional TV Ad

Same message to everyone watching



Facebook Ad

Personalized based on your recent searches

VS

"I'm Actively Looking!" - Search Ads

Advertising Channel 1: Search Engine Marketing (SEM)



What Are Search Ads?

Ads that appear at the **top of search engine results** for specific keywords



Pay-Per-Click (PPC) Model

You **only pay when someone clicks** on your ad, not just when it's shown



Google Ads Platform

The **largest advertising platform** in the world, reaching billions of users



Example: Searching for Headphones



buy wireless headphones at msila

Ad

Wireless Headphones - Jumia Algeria

www.jumia.dz

Shop for the latest wireless headphones with fast delivery in M'sila. Top brands at best prices.

Ad

Premium Audio Store – M'sila

www.audiostore.dz

High-quality wireless headphones with noise cancellation. Visit our store in msila.

Best Wireless Headphones 2023 - Tech Review

www.techreview.com

A comprehensive review of the best wireless headphones available in algeria...

"Where Everyone Hangs Out" - Social Ads

Advertising Channel 2: Social Media Advertising

Highly targeted ads within social media feeds



Facebook/Instagram

B2C Focus

Great for **demographic & interest-based** targeting

Example

An online fashion brand targets women 18-35 in Algiers interested in sustainable fashion



LinkedIn

B2B Focus

Perfect for **professional & industry** targeting

Example

A software company targets "IT Directors" at companies with 500+ employees



TikTok

Gen Z Focus,

the demographic cohort born roughly between 1997 and 2012

Ideal for **creative, viral content** targeting Gen Z

Example

A music app promotes through challenges with popular creators

"I See You Everywhere!" - Display & Retargeting

Advertising Channel 3: The Power of Display & Retargeting



Display Ads

Banner ads on websites across the internet



Retargeting/Remarketing

The **most powerful form**. Showing ads to people who have already visited your website or used your app

Classic Example: The Laptop That Follows You

1
↓

Initial Visit

You look at a laptop on Amazon but leave without buying

2
↓

Ad Follows You

For the next week, you see ads for that exact laptop on news sites, YouTube, and Facebook

3

Conversion

The reminders bring you back to complete the purchase

Why Digital Advertising Is So Powerful

The Magic Ingredient: Hyper-Targeting

Precision Targeting

You can **combine targeting criteria** to create a perfect audience

Higher ROI

Targeted ads result in **higher conversion rates** and better return on investment

Budget Efficiency

No wasted budget on **irrelevant audiences** - every impression counts

Example: "Fit&Tech" Gym in M'sila



Location

Within 10 km of their gym



Age

25-45 years old



Interests

"CrossFit," "Healthy Eating," "Wearable Technology"



Behaviors

Recently searched for "gym memberships"



Result: Their ad is only shown to this highly specific, likely-to-convert group. No wasted budget.

Is It Working? Data Doesn't Lie.

Measuring Success: Analytics & KPIs



Digital advertising's **superpower** is measurability

Key Performance Indicators (KPIs)

👁 Impressions

How many times the ad was seen

👤 Clicks & CTR

Engagement percentage

🛒 Conversions

Desired action (purchase, sign-up, download)

💰 CPA & ROAS

Cost per acquisition & return on ad spend

Why KPIs Matter

📈 Performance Tracking

Measure campaign effectiveness over time

⚡ A/B Testing

Compare different ad variations

💡 Budget Optimization

Allocate resources to best-performing channels

🧠 Audience Insights

Understand customer behavior and preferences

Essential Tools



Google Analytics



Facebook Ads Manager



Google Ads

2- In the Digital Economy, Your Ideas Are Your Currency

Intellectual Property: Your Most Valuable Digital Asset



Definition

Creations of the mind for which **exclusive rights** are recognized



Analogy

Just as you own your physical possessions (phone, laptop), you can **"own"** your original ideas and creations



Why It Matters for CS Students

You will build **software, websites, and apps**—all of which need protection

🏠 Main Types of Intellectual Property



Copyright حقوق النشر

Protects original works of authorship



Trademarks العلامات التجارية

Protects brand names, logos, and symbols



Patents البراءات

Protects inventions and unique processes

Copyright: The Automatic Shield

Copyright: Protecting Your Original Content



What It Protects

Original works of authorship fixed in a tangible form



Automatic Protection

The moment you create it, it's **protected**
(registration strengthens protection)

What It Covers in Digital Business



Software Code

The source code of your application



Website Content

Text, images, and videos on your site



Written Content

Blog articles & e-books



Visual Design

Graphics & UI/UX design

The Cost of Copying

Copyright Infringement: A Real-World Case



Scenario

"**DevStart**," a small startup, needs a website banner



The Mistake: A developer downloads a premium, copyrighted photo from a photographer's portfolio site and uses it **without permission or payment**



The Solution: Use royalty-free sites like **Unsplash**, **Pexels**, or purchase licenses from **Shutterstock**

⚠ The Consequence

1

The photographer finds the unauthorized use and sends a **Cease and Desist** letter

2

"DevStart" must **immediately take down** the image from their website

3

They face a **lawsuit for damages** and legal fees, which could be thousands of dollars

4

Potential **reputational damage** for the startup, affecting future business opportunities

Trademarks: Your Brand's Name and Face

Trademarks: Protecting Your Brand Identity



What It Protects

Words, names, symbols, slogans, or designs that identify the source of goods/services



Purpose: To prevent **consumer confusion** about the source of products or services

Symbols:

™ — Used for an unregistered trademark (shows you claim ownership).

® — Used for an officially registered trademark (legally protected).

★ Iconic Examples



Name

"Google"



Logo

The Nike Swoosh



Slogan

"Just Do It"
(Nike)



Color

Tiffany Blue
(specific shade)



Sound

The Netflix
"ta-dum"
sound

A Lesson in Brand Imitation

Trademark Infringement: Don't Cause Confusion!



Scenario

An entrepreneur creates a **new search engine**



The Mistake: They name it "**Appel**" with a logo of a partially eaten pear



Apple Inc.

Established tech giant

VS



"Appel"

New search engine

Always choose a **unique name and logo** that clearly **differentiates** your brand from others, especially famous ones.

⚠ The Consequence

1

Apple Inc. immediately sees this as a **threat to its brand**

2

They sue for **trademark infringement**, arguing it causes confusion

3

The court forces the entrepreneur to **rebrand**, destroying all marketing materials and domain names

4

Results in a **massive financial and reputational loss** for the entrepreneur



Lesson: Always conduct a **trademark search** before naming your product or company

Patents: For Groundbreaking Inventions

Patents: Protecting Your Inventions



What It Protects

New, useful, and non-obvious inventions, processes, or designs



Requirement

Must be **filed** and **garanted** by a government patent office

What It Covers:

1. How things work
2. What they do
3. How they do it
4. What they are made of



Duration

Typically **20 years** from filing date



Key Requirement: Must be **novel** and **non-obvious** to someone skilled in the field

★ Famous Digital Economy Examples



Amazon's "1-Click" Purchasing

A business method patent that gave them a huge competitive advantage



Google's PageRank Algorithm

The original core of their search engine was patented



Apple's "Slide to Unlock" Gesture

A user interface patent that protected a key interaction method

Beyond Physical Stores: Digital Commercial Assets

Commercial Property in the Digital Age



Your valuable business assets aren't just **physical** anymore

Key Digital Assets



Customer Databases

Your direct line to your market



Domain Names

Your digital real estate



Social Media Handles

Your brand's outpost



Trade Secrets

Confidential competitive edge

Digital Asset Value



Domain name
VECTOR ILLUSTRATION



Digital assets often have **higher value** than physical assets in modern businesses

The Problem of Bad Faith Domain Registration

Cybersquatting: Holding Digital Real Estate Hostage



What It Is

Registering, trafficking in, or using a domain name with **bad faith intent** to profit from someone else's trademark



Solution: Companies can fight this using the **Uniform Domain-Name Dispute-Resolution Policy (UDRP)**

Digital Real Estate



Example Scenario

1

A person knows that "**TechGiant Corp**" is planning to expand to Algeria

2

They quickly register the domain name **TechGiant.dz**

3

They then offer to sell it to "TechGiant Corp" for an **exorbitant price** (e.g., \$10,000)

Case Study: The Influencer's \$50,000 Mistake

Case Study 1: The Instagram Influencer



The Story

A fashion influencer with **2 million followers** creates a promotional video for a clothing brand



The Mistake: She uses a **popular song** from a famous artist as the background music **without obtaining a license**

2M

Followers

\$50K

Legal Settlement

⚠ The Consequence

1

The video is **taken down** by Instagram/YouTube for copyright infringement (a DMCA takedown notice)

2

The artist's record label **sues her for damages**

3

She faces a **legal settlement of over \$50,000** and damage to her reputation



Lesson: Always ensure you have the **rights to use all content** in your marketing

Case Study: A Startup's IP Strategy

Case Study 2: 'EcoWear' Startup



Scenario

"**EcoWear**" launches a line of clothing from **recycled plastics**

Smart IP Strategy



Copyright

Protects original text and product photos on website



Trademark

Registers name "EcoWear" and leaf-shaped logo



Patent

Files patent for unique fabric-recycling process



Trade Secret

Keeps supplier list and manufacturing techniques confidential

EcoWear Brand Identity



EcoWear

Sustainable Fashion for the Future



Result: When a large competitor tries to copy them, "EcoWear" has the **legal tools to defend** its business and its unique position in the market

Case Study: Protecting Software

Case Study 3: 'CodeCraft' Software Company



Scenario

"CodeCraft" develops a **revolutionary project management tool**

Protection Plan



Copyright

Automatically protects unique source code



Trademark

Protects product name and logo



Patent

Explores patenting unique algorithm



License Agreement

EULA defines software usage terms

IP Protection Moat



CodeCraft

Project Management, Redefined

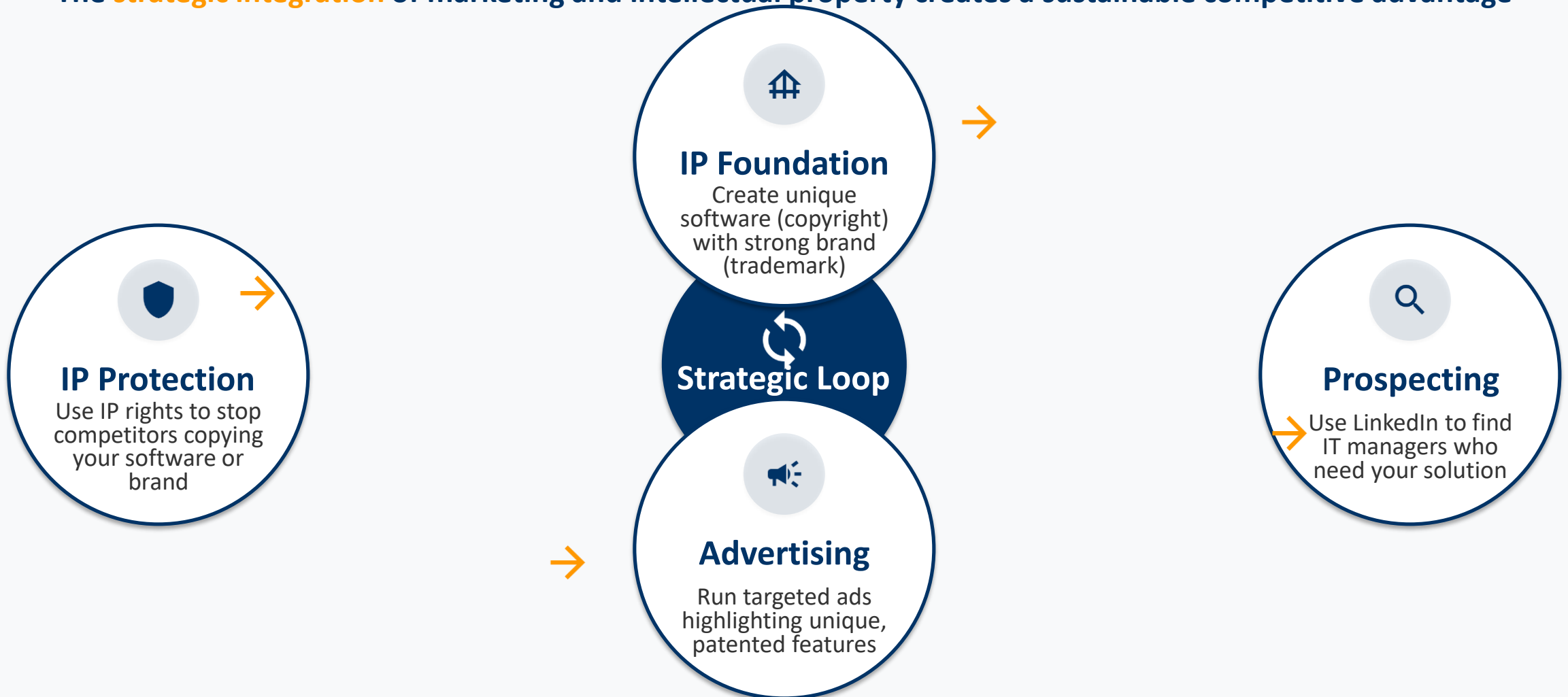


Result: A **comprehensive IP moat** that deters competitors and makes the company attractive to investors

How It All Fits Together: A Virtuous Cycle

The Strategic Loop: Marketing & IP Combined

The **strategic integration** of marketing and intellectual property creates a sustainable competitive advantage



Playing Fair: Ethics in Digital Marketing & IP

Ethical Considerations



Advertising

- ✓ Don't **misuse user data**
- ✓ Be **transparent** about tracking
- ✓ Avoid **clickbait**



Prospecting

- ✓ Respect **privacy laws** (like GDPR)
- ✓ Don't **spam**
- ✓ Provide **opt-out options**



Intellectual Property

- ✓ Be **inspired** by others
- ✓ Don't **plagiarize** or infringe
- ✓ Understand **"Fair Use"** doctrines

Your Professional Toolkit

Tools of the Trade



Prospecting



LinkedIn Sales Navigator



Hunter.io



Google Alerts



Advertising



Google Ads



Facebook Ads Manager



LinkedIn Campaign Manager



Analytics



Google Analytics



Facebook Insights



IP Protection



USPTO/GCCPO Databases



GitHub



Legal Counsel

What You've Learned

Key Takeaways



Electronic Prospecting

- ✓ Using **digital tools** to find potential customers with precision
- ✓ **Social listening**, SEO, lead magnets, and web analytics



Digital Advertising

- ✓ Deliver **personalized messages** to targeted audiences
- ✓ **Measure results** accurately with KPIs and analytics



Intellectual Property

- ✓ **Legal framework** protecting your digital creations
- ✓ **Copyright, trademarks, patents** safeguard your innovations



Digital Commercial Assets

- ✓ **Domain names** and customer data are valuable properties
- ✓ **Trade secrets** provide competitive advantage



Together, these elements form the core of building, promoting, and protecting a successful digital business



Thank you for your attention



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