

UNIT 6

Launching a Successful EC Website

(10 Hours) — MIS and E-Business (CACS301)

Building a successful e-commerce (EC) website is far more than writing code and putting up a page — it begins with sound business planning, continues through the technical process of building and hosting the site, and depends on ongoing content management, thoughtful design, and continual promotion once the site is live. This unit walks through that full life cycle: from planning an online business and evaluating its costs, benefits, and risks, through building and hosting the website, creating and managing web content, applying sound design and usability principles, and finally implementing payment systems and promoting the site through Search Engine Optimization (SEO).

6.1 Planning Online Businesses

Before a single line of website code is written, an organization must plan its online business carefully. Poor planning is one of the leading causes of failure for e-commerce ventures, so this stage focuses on defining the business idea, assessing whether it is financially and strategically sound, arranging funding, and choosing the right e-commerce model for the venture.

6.1.1 The Business Plan

A business plan is a written document that describes a company's business concept, goals, strategies, target market, and financial projections. For an online business, the plan must additionally describe the intended e-commerce model, the technology needed to support it, and how the venture will attract and retain customers on the web. A sound business plan typically includes the following components:

Component	Description
Executive summary	A brief overview of the business idea, mission, and goals
Company description	What the business does and the problem it solves online
Market analysis	Target customers, market size, and competitor analysis
Organization & management	Ownership structure and key management roles
Product/service line	What is being sold and its unique value proposition
Marketing & sales strategy	How the business will attract and convert customers
Funding request	Capital required and how it will be used

Component	Description
Financial projections	Revenue, cost, and profitability forecasts

Note: A business plan for an online venture should be treated as a living document — it should be revisited and revised as the business gathers real data on customer behavior, costs, and market response after launch.

6.1.2 The Cost-Benefit and Risk Elements of a Business Case

A business case builds on the business plan by making an explicit, structured argument for why the online venture (or a specific EC project within it) should be undertaken. It weighs the expected benefits against the costs and risks involved, helping decision-makers and investors judge whether the investment is justified.

- **Costs:** website development and hosting, software licenses and payment gateway fees, content creation, marketing and SEO, ongoing maintenance and security, and staff training.
- **Benefits:** wider market reach, lower transaction costs compared to a physical storefront, 24/7 availability, improved customer data collection, and faster order processing.
- **Risk elements:** technology risk (site downtime, security breaches), market risk (uncertain customer adoption), financial risk (revenue not covering costs), and competitive risk (rival sites capturing market share first).

Example — A Simple Cost-Benefit View

A small retailer estimates it will spend NPR 300,000 to build and launch an online store in its first year (website, hosting, payment gateway, marketing). If the store is expected to generate an additional NPR 450,000 in incremental sales in that same year, the net benefit of NPR 150,000, weighed against the identified risks (e.g. uncertain customer adoption), forms the basis of the business case presented to the owners for approval.

6.1.3 Funding a New Online Business

Once the business case justifies moving forward, the venture needs capital. Common sources of funding for a new online business include:

- **Personal savings / bootstrapping:** the founder funds the business from personal resources, retaining full ownership and control.
- **Bank loans:** debt financing from a financial institution, which must be repaid with interest regardless of business performance.
- **Angel investors:** wealthy individuals who provide capital in exchange for an equity stake, often at an early stage.

- Venture capital (VC): professional investment firms that fund high-growth startups in exchange for equity, usually at a later stage than angel investors.
- Crowdfunding: raising small amounts of money from a large number of people, typically via an online platform, often in exchange for early access to a product or a small reward.
- Government grants and incubators: support programs aimed at encouraging small business and technology entrepreneurship.

6.1.4 EC Model Selection

Selecting the right e-commerce (EC) model is one of the most important planning decisions, since it shapes the site's structure, target audience, revenue approach, and technology requirements.

EC Model	Description
B2C (Business-to-Consumer)	A business sells products/services directly to individual consumers
B2B (Business-to-Business)	A business sells products/services to other businesses
C2C (Consumer-to-Consumer)	Consumers sell directly to other consumers via a shared platform
C2B (Consumer-to-Business)	Individuals offer products/services to businesses
Marketplace model	The site acts as an intermediary connecting many buyers and sellers, earning commission on transactions
Subscription model	Customers pay a recurring fee for continued access to products, services, or content

Note: The choice of EC model should match the target market and the nature of what is being sold — a B2B parts supplier and a C2C secondhand-goods marketplace require very different site features, payment flows, and trust mechanisms.

Key Takeaways — Section 6.1

- ✓ A business plan documents the venture's goals, market, strategy, and financial projections before development begins.
- ✓ A business case weighs costs, benefits, and risks to justify the investment in an online venture.
- ✓ Funding options range from personal savings and bank loans to angel investment, venture capital, and crowdfunding.
- ✓ The right EC model (B2C, B2B, C2C, C2B, marketplace, subscription) must match the target market and product/service being offered.

6.2 The Process of Building a Website

Building a website is a structured technical process that follows planning. It involves designing the information architecture of the site, developing its pages, and making it accessible to the public through hosting and a domain name.

6.2.1 Steps in Building a Website

- Requirements gathering: define the site's purpose, target audience, and required features (catalog, cart, blog, contact forms, etc.).
- Information architecture: plan how content will be organized and how users will navigate between pages.
- Design: create wireframes and visual designs (layout, colors, typography) for key pages.
- Development: build the front-end (what users see) and back-end (databases, server logic) of the site.
- Content population: add text, images, product listings, and other content to the site's pages.
- Testing: check functionality, links, forms, and payment processes across browsers and devices.
- Deployment: upload the finished site to a web server and make it publicly accessible via a domain name.
- Maintenance: update content, fix issues, and monitor performance and security after launch.

6.2.2 Basic Hierarchical Website Structure

Most websites — especially e-commerce sites — are organized using a hierarchical structure, in which a single home page branches out into major sections, which in turn branch into sub-sections and individual pages. This tree-like structure mirrors how users naturally think about categories and sub-categories, and it makes navigation predictable and consistent.

- Home page: the top-level entry point that introduces the site and links to its major sections.
- Category/section pages: the main branches — such as About Us, Products, Services, or Contact — that organize related content.
- Sub-category pages: further division within a category, for example individual product categories within a Products section.
- Detail/leaf pages: the most specific pages, such as an individual product page, which typically sit at the bottom of the hierarchy.

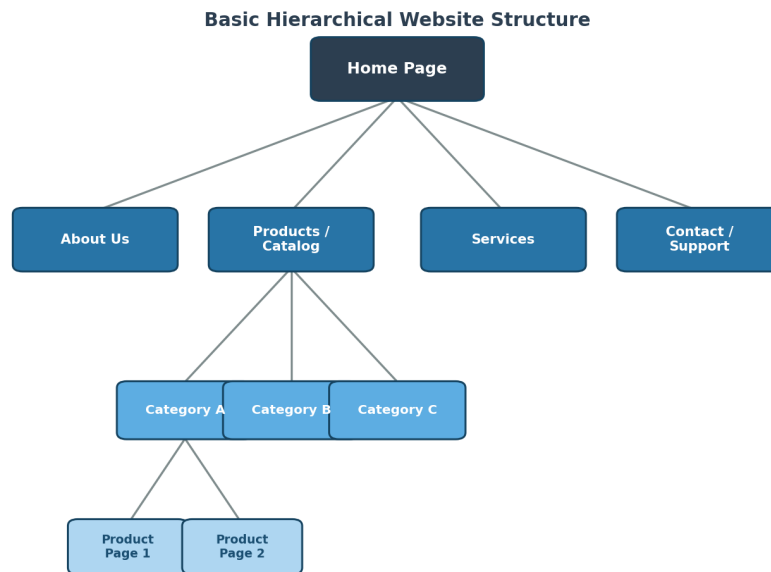


Figure 6.1: A basic hierarchical website structure, branching from the home page down through categories, sub-categories, and individual product pages.

Note: A good hierarchy generally keeps important content within three clicks of the home page — deeper structures make it harder for users (and search engines) to find content.

6.2.3 Website Hosting and Obtaining a Domain Name

For a website to be accessible on the Internet, it needs two things: a domain name (the human-readable address such as www.example.com) and web hosting (server space where the site's files and databases actually reside).

- **Domain name registration:** a unique name is registered through a domain registrar for a yearly fee, and points to the hosting server via DNS (Domain Name System) records.
- **Web hosting:** a hosting provider allocates server space and resources (storage, bandwidth, processing power) to store and serve the website's files.
- **Types of hosting:** shared hosting (multiple sites share one server — low cost, limited resources), Virtual Private Server (VPS) hosting (dedicated portion of a server), dedicated hosting (an entire server for one site), and cloud hosting (resources scale flexibly across a network of servers).

cPanel is one of the most widely used web hosting control panels. It gives site owners a graphical interface to manage server-side tasks without needing to use the command line directly.

cPanel Function	Purpose
File Manager	Upload, edit, and organize website files directly on the server
MySQL Databases	Create and manage databases used by the website (e.g. for a shopping cart or CMS)

cPanel Function	Purpose
Email Accounts	Create and manage domain-based email addresses (e.g. info@example.com)
Domains/Subdomains	Add additional domains or subdomains pointing to the hosting account
FTP Accounts	Set up File Transfer Protocol access for uploading files remotely
Backups	Create and restore backups of website files and databases
SSL/TLS	Install security certificates to enable HTTPS (encrypted) connections

To upload an EC site to the web server, the developer typically connects to the hosting account using either the cPanel File Manager or an FTP client, transfers the website's files (HTML/CSS/JavaScript, images, and any server-side scripts) into the correct directory (commonly public_html), and then creates and imports any required databases through the database management tool. Once the domain's DNS correctly points to the hosting server and the files are in place, the site becomes live and accessible to visitors worldwide.

Typical Steps to Go Live

Purchase a domain name and a hosting plan suited to the site's expected traffic.

Point the domain's DNS (nameservers) to the hosting provider.

Log in to cPanel and create any databases the site needs.

Upload website files into the public_html directory via File Manager or FTP.

Import the database and update configuration files with the correct database credentials.

Install an SSL certificate and test the live site thoroughly before promoting it.

Key Takeaways — Section 6.2

- ✓ Building a website follows a structured process: requirements, architecture, design, development, content, testing, deployment, and maintenance.
- ✓ A hierarchical structure organizes a site from the home page down through categories, sub-categories, and detail pages.
- ✓ A domain name and web hosting are both required to make a site publicly accessible; cPanel is a common control panel for managing hosting.
- ✓ Launching a site involves uploading files (often to public_html), setting up databases, and pointing DNS correctly before it goes live.

6.3 Web Content Creation and Management

6.3.1 Web Content

Web content refers to all the information — text, images, video, audio, and interactive elements — presented on a website's pages. Content is the primary reason visitors come to a site, and its quality directly affects whether visitors trust the business, stay on the site, and ultimately make a purchase.

6.3.2 Categories and Types of Content

Category	Examples
Informational content	About Us pages, FAQs, articles, blog posts, help guides
Product/catalog content	Product descriptions, specifications, prices, images
Transactional content	Shopping cart, checkout pages, order confirmations
Multimedia content	Photos, product videos, infographics, audio clips
User-generated content	Customer reviews, ratings, comments, testimonials
Navigational content	Menus, breadcrumbs, site maps, search results

6.3.3 Content Management and Maintenance

Content management is the ongoing process of creating, editing, organizing, publishing, and eventually archiving or removing content on a website. Most organizations use a Content Management System (CMS) — software that allows non-technical staff to update web pages without directly editing code.

- **Creation:** writing, designing, and producing new content (text, images, video) for the site.
- **Review and approval:** checking content for accuracy, tone, and compliance before it is published.
- **Publishing:** making approved content live on the website.
- **Maintenance:** regularly reviewing existing content to keep it accurate, up to date, and free of broken links or outdated information.
- **Archiving/removal:** retiring content that is no longer relevant or accurate, while preserving records where needed.

Note: Stale or outdated content — broken links, old prices, discontinued products still listed for sale — is one of the fastest ways to erode a visitor's trust in an e-commerce site.

6.3.4 Catalog Content and Its Management

For an e-commerce site, the product catalog is the most business-critical content on the site, since it directly drives sales. Catalog content typically includes product names, descriptions,

images, prices, specifications, availability, and categorization.

- **Accuracy:** prices, stock levels, and specifications must be kept synchronized with actual inventory and pricing systems.
- **Consistency:** product descriptions and images should follow a consistent format and style across the catalog.
- **Categorization:** products must be organized into logical categories and tagged so customers can find them through browsing or search.
- **Search-friendliness:** product titles and descriptions should include terms customers are likely to search for, both on-site and via search engines.
- **Regular updates:** new products must be added, discontinued products removed, and seasonal or promotional information updated in a timely manner.

Example — Catalog Content Management in Practice

An online electronics store adds a new smartphone model to its catalog: the team writes a consistent product description, uploads standardized product photos, sets the price and stock level from the inventory system, assigns it to the "Smartphones" and "New Arrivals" categories, and schedules the removal of an older discontinued model from active listings on the same day.

Key Takeaways — Section 6.3

- ✓ Web content spans informational, product/catalog, transactional, multimedia, user-generated, and navigational categories.
- ✓ Content management covers the full life cycle: creation, review, publishing, maintenance, and archiving.
- ✓ A Content Management System (CMS) lets non-technical staff maintain content without editing code directly.
- ✓ Catalog content is especially critical for EC sites and must stay accurate, consistent, well-categorized, and search-friendly.

6.4 Website Design Criteria

Good design is what turns a functional website into an effective one. This section covers the core design criteria an EC website should meet: a clear site map and navigation, a well-organized page layout, appropriate use of color and graphics, strong usability, and good performance.

6.4.1 Site Map and Navigation

A site map is a structured overview of all the pages on a website and how they relate to one another — essentially a visual or textual representation of the site's hierarchy (see Figure 6.1). It

helps designers plan the site during development and helps both users and search engines understand the site's structure once it is live.

Navigation refers to the menus, links, and other elements that let visitors move between pages. Good navigation should be:

- Consistent: the same navigation menu should appear in the same place on every page.
- Predictable: labels should clearly describe where a link leads (e.g. "Contact Us" rather than "Get in Touch With The Team").
- Shallow: important pages should be reachable within a small number of clicks from the home page.
- Supported by breadcrumbs: a trail (e.g. Home > Electronics > Laptops) that shows users where they are within the site hierarchy.
- Supported by search: a visible search box helps users who prefer to search directly rather than browse the menu structure.

6.4.2 Web Page Layout Grid

A layout grid divides a web page into consistent regions — such as header, navigation, sidebar, main content, and footer — that organize where different types of content appear. Using a grid keeps pages visually consistent and helps guide the visitor's eye to the most important content first.

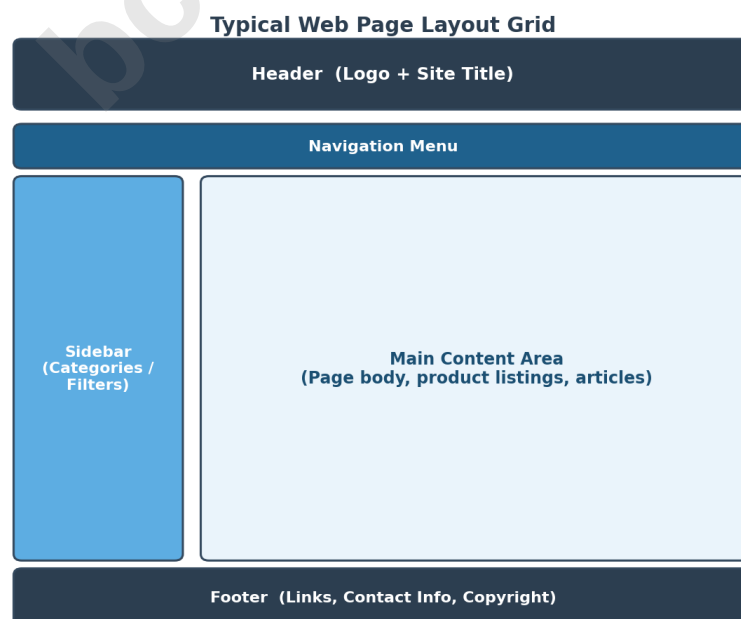


Figure 6.2: A typical web page layout grid, dividing the page into header, navigation, sidebar, main content, and footer regions.

Region	Typical Content
Header	Logo, site title, sometimes a search bar or account/cart icons
Navigation	Main menu linking to major site sections
Sidebar	Category filters, related links, secondary navigation
Main content	The primary purpose of the page — product listings, articles, forms
Footer	Contact details, legal links, sitemap links, copyright notice

6.4.3 Colors and Graphics

Color and graphics shape a visitor's first impression of a site and reinforce its brand identity. Design choices should be intentional rather than arbitrary.

- **Brand consistency:** colors should reflect the organization's brand and be used consistently across all pages.
- **Contrast and readability:** text should have sufficient contrast against its background so it remains easy to read.
- **Limited palette:** using a small, deliberate set of colors (a primary color, an accent color, and neutral tones) looks more professional than an unstructured mix of many colors.
- **Purposeful graphics:** images and icons should support understanding (e.g. product photos, explanatory icons) rather than being purely decorative clutter that slows the page down.
- **Optimized file sizes:** images should be compressed appropriately so they load quickly without excessive loss of quality.

6.4.4 Website Usability

Usability measures how easily and effectively visitors can achieve their goals on a website — finding information, comparing products, or completing a purchase.

- **Learnability:** new visitors should be able to understand how to use the site quickly, without training.
- **Efficiency:** returning visitors should be able to complete tasks quickly once they are familiar with the site.
- **Error prevention and recovery:** forms should validate input and give clear error messages so users can correct mistakes easily.
- **Accessibility:** the site should be usable by people with disabilities, for example through proper alt text for images and keyboard-navigable menus.

- Mobile-friendliness: the site should work well on smartphones and tablets, since a large share of EC traffic comes from mobile devices.

6.4.5 Website Performance

Performance refers to how quickly and reliably a website responds to visitors. Slow-loading pages are a leading cause of visitors abandoning a site before completing a purchase.

- Page load speed: optimizing images, code, and server response time so pages load quickly.
- Uptime/reliability: ensuring the hosting infrastructure keeps the site available with minimal downtime.
- Scalability: the site should be able to handle traffic spikes, such as during a sale or promotional campaign, without slowing down or crashing.
- Caching and content delivery: using browser caching and Content Delivery Networks (CDNs) to serve content faster to visitors in different locations.

Note: A one-second delay in page load time can measurably reduce conversion rates on an e-commerce site — performance is a design criterion, not just a technical detail.

Key Takeaways — Section 6.4

- ✓ A site map documents site structure; good navigation is consistent, predictable, and shallow.
- ✓ A layout grid organizes pages into header, navigation, sidebar, main content, and footer regions.
- ✓ Colors and graphics should be used consistently and purposefully to support brand identity and readability.
- ✓ Usability and performance directly affect whether visitors can — and want to — complete their goals on the site.

6.5 Implementation of Payment Systems, Website Promotion, and SEO

6.5.1 Implementation of Payment Systems

For an EC site to actually generate revenue, it must let customers pay securely and conveniently. Implementing a payment system typically involves integrating one or more payment gateways — services that securely transmit payment information between the customer, the merchant's website, and the relevant banks or card networks.

Payment Method	Description
Credit/debit cards	Card payments processed through a payment gateway (e.g. Visa, Mastercard networks)
Digital wallets	Stored-value or linked-account payment apps (e.g. mobile wallets)
Bank transfers	Direct transfer of funds from the customer's bank account
Cash on delivery (COD)	Payment collected in cash when the order is delivered
Payment gateway aggregators	Third-party services that combine multiple payment options behind one integration

- **Security:** payment pages must use HTTPS/SSL encryption, and card data should be handled according to PCI-DSS (Payment Card Industry Data Security Standard) requirements.
- **Reliability:** the payment process should confirm success or failure clearly, and failed transactions should not leave orders in an unclear state.
- **Multiple options:** offering more than one payment method reduces the chance that a customer abandons checkout because their preferred method isn't available.
- **Simplicity:** the checkout process should require the minimum number of steps and fields needed to complete a purchase.

Note: Cart abandonment often spikes at the payment step — a confusing, slow, or insecure-looking checkout page can undo all the work put into attracting the visitor in the first place.

6.5.2 Website Promotion

Once a site is live, it must be actively promoted to attract visitors. Website promotion covers the full set of activities used to increase a site's visibility and drive traffic.

- **Social media marketing:** promoting the site and its products through social platforms.
- **Email marketing:** sending newsletters, promotions, and personalized offers to a subscriber list.
- **Content marketing:** publishing useful articles, guides, or videos that attract visitors and build trust before they buy.
- **Paid advertising:** pay-per-click (PPC) ads on search engines or social platforms that drive targeted traffic.
- **Affiliate marketing:** partnering with other websites or influencers who earn a commission for referring customers.
- **Offline promotion:** traditional advertising, print materials, or word of mouth that direct people to the website.

6.5.3 Search Engine Optimization (SEO)

Search Engine Optimization is the practice of improving a website so that it ranks higher in unpaid ("organic") search engine results, increasing the amount of relevant traffic the site receives without paying for each visitor directly.

SEO Category	Key Practices
On-page SEO	Using relevant keywords in titles, headings, and content; writing descriptive meta tags; using clean, descriptive URLs
Technical SEO	Ensuring fast page load speed, mobile-friendliness, secure HTTPS connections, and a valid sitemap.xml for search engines to crawl
Off-page SEO	Earning backlinks from other reputable websites, which signal trust and authority to search engines
Content SEO	Publishing original, useful, and regularly updated content that answers what users are searching for

Basic SEO Checklist for an EC Site

Research and use relevant keywords naturally in product titles and descriptions.

Write unique meta titles and meta descriptions for every page.

Use descriptive, human-readable URLs (e.g. /shoes/running-shoes, not /p?id=482).

Add descriptive alt text to product images.

Ensure the site loads quickly and displays correctly on mobile devices.

Submit an XML sitemap to search engines and fix any broken links.

Note: SEO is an ongoing effort, not a one-time task — search engine algorithms change over time, and content, technical health, and backlinks all need continued attention after launch.

Key Takeaways — Section 6.5

- ✓ A secure, reliable, and simple payment implementation is essential to actually convert visitors into paying customers.
- ✓ Website promotion spans social media, email, content marketing, paid ads, affiliate marketing, and offline channels.
- ✓ SEO improves organic search visibility through on-page, technical, off-page, and content-focused practices.
- ✓ Payments, promotion, and SEO are ongoing activities that continue well beyond the site's initial launch.

— End of Unit 6 —