



**TISHK INTERNATIONAL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**Department of Information Technology**

**E-COMMERCE & E-BUSINESS**  
**IT 355**  
**2025-2026 Fall**

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# **Lec 4**

## **Building an E-commerce Presence**

**Dr. Hala Najwan Sabeh**

**Adapted from  
E-commerce 2021–2022: business. technology. society**

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# Objectives

- Identify the questions you must ask and answer when developing an e-commerce presence.
- Describe the SWOT Analysis.
- Identify the factors that you must consider when building an e-commerce site .
- Discuss the systems (Website) development life cycle.
- Identify the e-commerce website features that annoy customers.
- Discuss the eight most important factors in successful e-commerce site design.



# Imagine Your E-commerce Presence

- **Questions you must ask and answer when developing an e-commerce presence include: (Review Questions-Q1)**
  1. What is your vision and how do you hope to accomplish it?
  2. What is your business and revenue model?
  3. Who and where is the target audience?
  4. What are the characteristics of the marketplace?
  5. Where is the content coming from?
  6. Conduct a SWOT analysis.
  7. Develop a timeline.
  8. Develop a detailed budget.



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# Imagine Your E-commerce Presence (continued)

## 1) What's the idea? (The visioning process)

- ❖ Before you can plan and actually build an e-commerce presence, you need to have a vision of what you hope to accomplish and how you hope to accomplish it.
- ❖ The vision includes:
  - Mission statement
  - Target audience
  - Intended market space
  - Development timeline and preliminary budget
  - Strategic analysis (SWOT)

[illegible]

- For Amazon, it's to become the largest marketplace on earth.
- For Facebook, it's to make the world more open and connected
- For Google, it's to organize the world's information and make it universally accessible and useful.





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# Imagine Your E-commerce Presence (continued)

## 2) Where's the \$\$money?

### ❖ Business model(s): (B2C)

- Portal, e-tailer, content provider, transaction broker, market creator, service provider, community provider

### ❖ Revenue model(s):

- Advertising, subscriptions, transaction fees, sales, and affiliate revenue



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## Imagine Your E-commerce Presence (continued)

### 3) Who and where is the target audience?

❖ Describing your target audience depending on these factors

1. Demographics

❖ Age, gender, income, location

2. Behavior patterns (lifestyle)

3. Consumption patterns (purchasing habits)

4. Digital usage patterns (consumer actions on the web)

5. Content creation patterns (blogs, Facebook)

6. Buyers' personas and characteristics



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# Imagine Your E-commerce Presence (continued)

## 4) Characterize the marketplace

- 1) Demographics
- 2) Size, growth, changes
- 3) Structure
  - Competitors
  - Suppliers
  - Substitute products





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# Imagine Your E-commerce Presence (continued)

(Review Questions-Q3)

## 6) Conduct a SWOT analysis

- A SWOT analysis is a compilation of your company's strengths (S), weaknesses (W), opportunities (O) and threats (T).
- The primary objective of a SWOT analysis is to help organizations develop a full awareness of all the factors involved in making a business decision.



# SWOT Analysis

(Review Questions-Q4)

**Strengths (an Internal factor)** describe what an organization excels at and what separates it from the competition.

**Weaknesses (an Internal factor)** describe factors that stop an organization from performing at its optimum level. They are areas where the business needs to improve to remain competitive in the market.

**Opportunities (external factor)** refer to favorable external factors that could give an organization a competitive advantage.

**Threats (external factor)** refer to factors that have the potential to harm an organization.





# SWOT Analysis

## SWOT analysis matrix

### **STRENGTHS**

What does your organization do better than your competition?

### **WEAKNESSES**

What does your organization need to improve upon?

### **OPPORTUNITIES**

What market trends could lead to increased sales?

### **THREATS**

What are the advantages competitors have over your organization?



# SWOT Analysis

(Review Questions-Q5)

## Internal factors

Strengths (S) and weaknesses (W) refer to internal factors, which are the resources and experience readily available to you.

These are some commonly considered internal factors:

1. **Financial resources** (funding, sources of income and investment opportunities)
2. **Physical resources** (location, facilities and equipment)
3. **Human resources** (employees)
4. **Current processes** (employee programs, department hierarchies and software systems – like Accounting Software)



# SWOT Analysis

(Review Questions-Q6)

## External factors

External forces influence and affect every company, organization and individual. Whether these factors are connected directly or indirectly to an opportunity (O) or threat (T), it is important to note and document each one.

Opportunity (O) and threat (T) refer to External factors, which are typically things you or your company **do not control**, such as the following:

1. **Market trends** (new products, technology advancements and shifts in audience needs).
2. **Economic trends** (local, national and international financial trends)
3. **Demographics.**
4. **Relationships with suppliers and partners.**
5. **Political, environmental and economic regulations.**



# SWOT Analysis

<b>Name</b>	KFC (Kentucky Fried Chicken)
<b>Industries served</b>	Restaurants, Fast Food
<b>Geographic areas served</b>	Worldwide
<b>Headquarters</b>	U.S.
<b>Main Competitors</b>	McDonald's Corporation, Burger King Worldwide Inc., Subway and many others.





# SWOT Analysis



SWOT 

Strengths	Weaknesses
<ol style="list-style-type: none"><li>1. Second best global brand in fast food industry in terms of value.</li><li>2. Original 11 herbs and spices recipe</li><li>3. KFC is the market leader in the world among companies featuring chicken as their primary product offering</li></ol>	<ol style="list-style-type: none"><li>1. Unhealthy food menu</li><li>2. High employee turnover</li><li>3. Lack of strong marketing efforts</li></ol>





# SWOT Analysis



Opportunities	Threats
<ul style="list-style-type: none"><li>1. KFC could introduce more healthy food choices in its menu and reverse its weakness into strength</li><li>2. Introducing new products to its only chicken range</li></ul>	<ul style="list-style-type: none"><li>1. Saturated fast-food markets in the developed economies</li><li>2. Trend towards healthy eating</li><li>3. Local fast food restaurant chains</li></ul>



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# Imagine Your E-commerce Presence (continued)

## 7) Develop a timeline: milestones (Review Questions- Q7 & Q8)

Table 4.1 illustrates a one-year timeline for the development of a startup e-commerce company.

TABLE 4.1 E-COMMERCE PRESENCE TIMELINE		
PHASE	ACTIVITY	MILESTONE
Phase 1: Planning	Envision e-commerce presence; determine personnel	Mission statement
Phase 2: Website development	Acquire content; develop a site design; arrange for hosting the site	Website plan
Phase 3: Web implementation	Develop keywords and metatags; focus on search engine optimization; identify potential sponsors	A functional website
Phase 4: Social media plan	Identify appropriate social platforms and content for your products and services	A social media plan
Phase 5: Social media implementation	Develop Facebook, Instagram, Twitter, and Pinterest presence	Functioning social media presence
Phase 6: Mobile plan	Develop a mobile plan; consider options for porting your website to mobile devices	A mobile plan



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- ❖ Developing a clear understanding of business objectives.
- ❖ Knowing how to choose the right technology to achieve those objectives.



# Pieces of the Site-Building Puzzle

(Review Questions-Q9)

## ■ Factors you must consider when building an e-commerce site include:

1. Human resources and organizational capabilities (Creating team with skill set needed to build and manage a successful site).
2. Hardware/Software.
3. Telecommunications capacity.
4. Site design.



# The Systems (Website) Development Life Cycle

(Review Questions-Q10)

- **System development life cycle** is the methodology for understanding business objectives of a system and designing an appropriate solution.



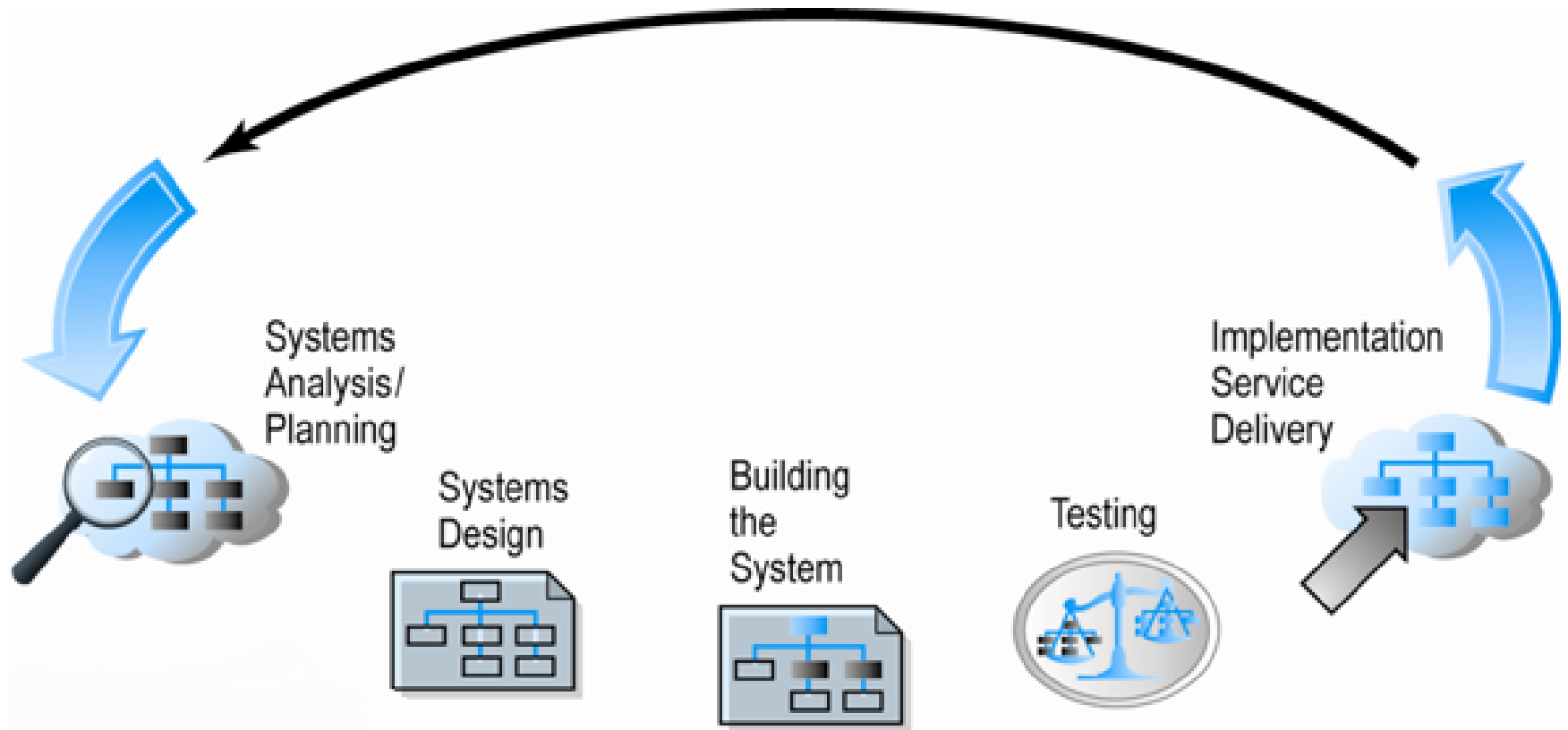
# The Systems (Website) Development Life Cycle (continued)

(Review Questions-Q11)

- The systems development life cycle for building an e-commerce web site involves **Five** major steps:

1. Systems analysis/planning.
2. Systems design.
3. Building the system.
4. Testing.
5. Implementation and maintenance.

# Web Site Systems Development Life Cycle



**Figure.** illustrates the five major steps involved in the systems development life cycle



# The Systems (Website) Development Life Cycle

- The **systems development life cycle** for building an e-commerce web site involves **Five major steps**:

1. Systems analysis/planning
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# 1) System Analysis/Planning

System Analysis/Planning phase identifies the specific business objectives for the site, and then develop a list of system functionalities and information requirements.



### **Business objectives**

capabilities you want  
your site to have

**TABLE 4.2**

#### **SYSTEM ANALYSIS: BUSINESS OBJECTIVES, SYSTEM FUNCTIONALITIES, AND INFORMATION REQUIREMENTS FOR A TYPICAL E-COMMERCE SITE**

<b>BUSINESS OBJECTIVE</b>	<b>SYSTEM FUNCTIONALITY</b>	<b>INFORMATION REQUIREMENTS</b>
Display goods	Digital catalog	Dynamic text and graphics catalog
Provide product information (content)	Product database	Product description, stocking numbers, inventory levels
Personalize/customize product	Customer on-site tracking	Site log for every customer visit; data mining capability to identify common customer paths and appropriate responses
Engage customers in conversations	On-site blog	Software with blogging and community response functionality
Execute a transaction	Shopping cart/payment system	Secure credit card clearing; multiple payment options
Accumulate customer information	Customer database	Name, address, phone, and e-mail for all customers; online customer registration
Provide after-sale customer support	Sales database	Customer ID, product, date, payment, shipment date
Coordinate marketing/advertising	Ad server, e-mail server, e-mail, campaign manager, ad banner manager	Site behavior log of prospects and customers linked to e-mail and banner ad campaigns
Understand marketing effectiveness	Site tracking and reporting system	Number of unique visitors, pages visited, products purchased, identified by marketing campaign
Provide production and supplier links	Inventory management system	Product and inventory levels, supplier ID and contact, order quantity data by product



**System functionalities:**

types of information  
systems capabilities you  
will need to achieve your  
business objectives

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**Information requirements:**

the information elements that the system must produce in order to achieve the business objectives



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# The Systems (Website) Development Life Cycle

- The **systems development life cycle** for building an e-commerce web site involves

## **Five major steps:**

1. Systems analysis/planning
2. Systems design
3. Building the system
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# Systems Design: Hardware and Software Platforms

- System design specification is the description of main components of a system and their relationship to one another.



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# Build/Host Your Own vs. Outsourcing

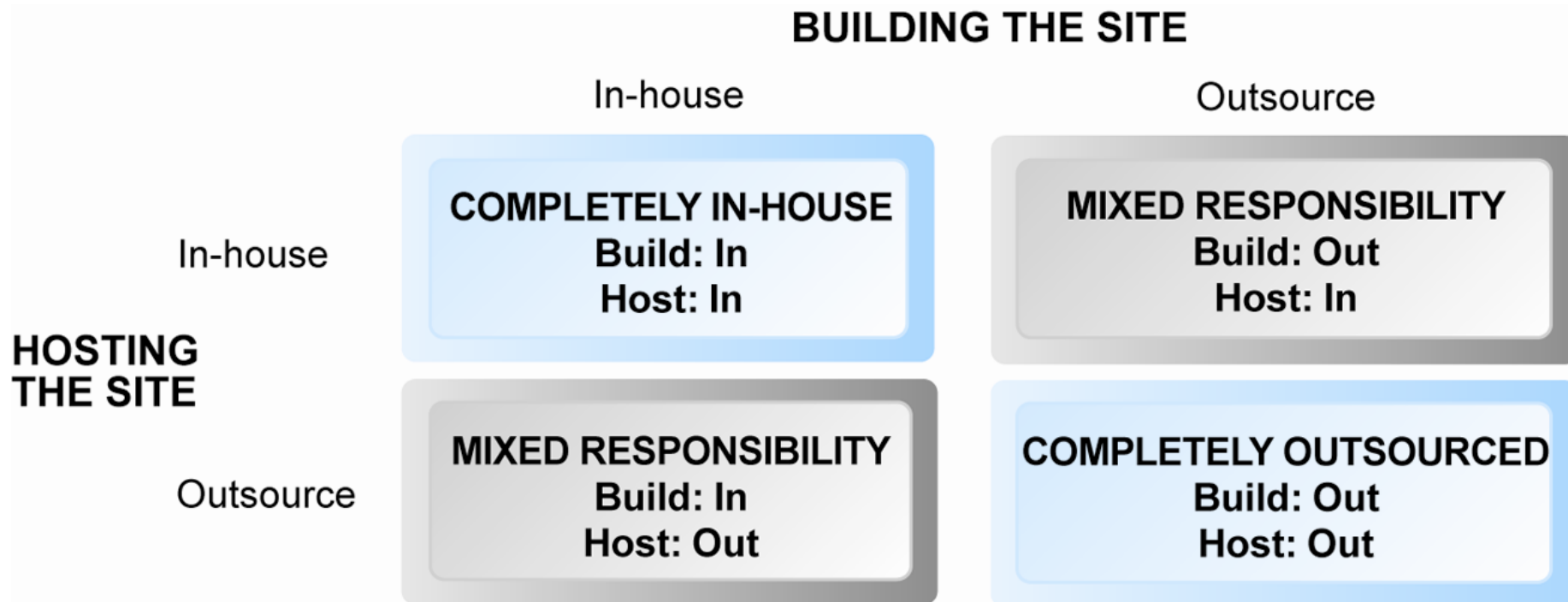
(Review Questions-Q12)

- **Outsourcing:** hiring an outside vendor to provide the services you cannot perform with in-house personnel
  
- **Build own vs. outsourcing:**
  - ❖ Build your own requires team with diverse skill set; choice of software tools; both risks and possible benefits
  
- **Hosting vs. Co-location**
  - ❖ **Hosting:** Hosting company responsible for ensuring site is accessible 24/7, for monthly fee. Example: GoDaddy, Bluehost.
  - ❖ **Co-location:** Firm purchases or leases Web server (with control over its operation), but server is located at vendor's facility



# Choices in Building and Hosting

You have a number of alternatives to consider when building and hosting an e-commerce site.





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# Testing

(Review Questions-Q13, Q14, and Q15)

## ■ Testing

- 1) **Unit testing:** involves testing the site's program modules one at a time.
- 2) **System testing:** involves testing the site as a whole, in a way the typical user will use the site.
- 3) **Acceptance testing:** verifies that the business objectives of the system as originally conceived are in fact working.
- 4) **A/B testing** (split testing) involves showing two versions of a web page or website to different users to see which one performs better.





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# Implementation and Maintenance

## ■ Implementation and maintenance:

- ❖ Maintenance is ongoing.
- ❖ Maintenance costs: Similar to development costs.
- ❖ The long-term success of an e-commerce site will depend on a dedicated team of employees (the Web team) whose sole job is to monitor and adapt the site to changing market conditions.



## Implementation and Maintenance (continued)

### ■ Implementation and maintenance:

- ❖ The Web team must be multi-skilled; it will typically include programmers, designers, and business managers drawn from marketing, production, and sales support.





# E-commerce Tools

## ■ Personalization

- ❖ Ability to treat people based on personal qualities and prior history with site.

## ■ Customization

- ❖ Ability to change the product to better fit the needs of the customer.

## ■ Cookies

- ❖ Primary method to achieve personalization.



# The Information Policy Set

## ■ Privacy policy

- ❖ Set of public statements declaring how site will treat customers' personal information that is gathered by site.





# E-COMMERCE WEBSITE FEATURES THAT ANNOY CUSTOMERS

(Review Questions-Q17)

**TABLE 4.10**

## **E-COMMERCE WEB SITE FEATURES THAT ANNOY CUSTOMERS**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Requiring user to view ad or Flash introduction before going to Web site content</li><li>• Pop-up and pop-under ads and windows</li><li>• Too many clicks to get to the content</li><li>• Links that don't work</li><li>• Confusing navigation; no search function</li><li>• Requirement to register and log in before viewing content or ordering</li><li>• Slow loading pages</li><li>• Content that is out of date</li></ul> | <ul style="list-style-type: none"><li>• Inability to use browser's Back button</li><li>• No contact information available (Web form only)</li><li>• Unnecessary splash/flash screens, animation, etc.</li><li>• Music or other audio that plays automatically</li><li>• Unprofessional design elements</li><li>• Text not easily legible due to size, color, format</li><li>• Typographical errors</li><li>• No or unclear returns policy</li></ul> |
|---|---|



# The eight most important factors in successful e-commerce site design

(Review Questions-Q18)

TABLE 4.11 THE EIGHT MOST IMPORTANT FACTORS IN SUCCESSFUL E-COMMERCE SITE DESIGN	
FACTOR	DESCRIPTION
Functionality	Pages that work, load quickly, and point the customer toward your product offerings
Informational	Links that customers can easily find to discover more about you and your products
Ease of use	Simple fool-proof navigation
Redundant navigation	Alternative navigation to the same content
Ease of purchase	One or two clicks to purchase
Multi-browser functionality	Site works with the most popular browsers
Simple graphics	Avoids distracting, obnoxious graphics and sounds that the user cannot control
Legible text	Avoids backgrounds that distort text or make it illegible



# References

- **Laudon, K. C., & Traver, C. G. (2021). E-commerce 2021–2022: business. technology.society. Pearson Education Limited.**



# Review Questions

- **Q1:** What are the questions that you must ask and answer when developing an e-commerce presence? List them.
- **Q2:** What is the vision for Amazon, Facebook, and Google?
- **Q3:** What is a SWOT analysis?
- **Q4:** Define strengths (S), weaknesses (W), opportunities (O), and threats (T).
- **Q5:** Strengths (S) and weaknesses (W) refer to internal factors, which are the resources and experience readily available to you. List four of the internal factors that you can consider when conducting the SWOT analysis.



# Review Questions

- **Q6:** Opportunity (O) and threat (T) refer to external factors, which are typically things you or your company do not control. List four of the external factors that you can consider when conducting the SWOT analysis.
- **Q7:** Identify the different phases used in a one-year timeline for the development of an e-commerce presence and the related activities and milestones for each phase.
- **Q8:** List the different phases used in a one-year timeline for the development of an e-commerce presence.
- **Q9:** What are the main factors to consider when developing an e-commerce site?



- # Slide 1-58





## Review Questions

- **Q16:** What are the two most important tasks that the teams working on e-commerce websites should do during the phase of implementation and maintenance?
- **Q17:** List the five e-commerce website features that annoy customers.
- **Q18:** List the eight most important factors in successful e-commerce site design, then explain two of these factors in detail.