Cybersecurity in Marketing, Advanced

8127 36 weeks

Table of Contents

Acknowledgments ......................................................................................................................................... 1
Course Description........................................................................................................................................ 2
Task Essentials Table.................................................................................................................................... 3
Curriculum Framework................................................................................................................................. 4
Understanding Principles in Marketing and Cybersecurity .......................................................................... 4
Investigating Digital Privacy and Ethics....................................................................................................... 8
Examining Marketing Data.......................................................................................................................... 14
Understanding Cybersecurity Risks in Marketing ....................................................................................... 17
Securing Data.............................................................................................................................................. 20
Investigating Marketing Cybersecurity Careers.......................................................................................... 22
SOL Correlation by Task............................................................................................................................. 24
DECA Inc. Information ............................................................................................................................... 26
Related DECA Inc. Competitive Events....................................................................................................... 27
Teacher Resource......................................................................................................................................... 27
Appendix: Credentials, Course Sequences, and Career Cluster Information ............................................. 28

Acknowledgments

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Cybersecurity in Marketing, Advanced focuses on cybersecurity fundamentals, threats and vulnerabilities, and data security and ethics. Students will investigate cybersecurity concerns pertaining to promotion, engagement of customers, customer service, brand building, and sales through the use of websites, social media, digital messaging, streaming video, digital display
advertising, and app marketing. The integrity of strategic marketing plans and marketing campaign hijacking will also be examined.

**Task Essentials Table**

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential
- Tasks/competencies designated by empty-circle icons (○) are optional
- Tasks/competencies designated by minus icons (⊖) are omitted
- Tasks marked with an asterisk (*) are sensitive.

<table>
<thead>
<tr>
<th>Task Number</th>
<th>Tasks/Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Principles in Marketing and Cybersecurity</td>
<td></td>
</tr>
<tr>
<td>39 ⊕</td>
<td>Explain marketing concepts in a digital environment.</td>
</tr>
<tr>
<td>40 ⊕</td>
<td>Explain the functions of marketing.</td>
</tr>
<tr>
<td>41 ⊕</td>
<td>Relate marketing strategies to cybersecurity issues.</td>
</tr>
<tr>
<td>42 ⊕</td>
<td>Examine marketing trends with cybersecurity implications.</td>
</tr>
<tr>
<td>Investigating Digital Privacy and Ethics</td>
<td></td>
</tr>
<tr>
<td>43 ⊕</td>
<td>Differentiate between ethical and unethical use of information resources.</td>
</tr>
<tr>
<td>44 ⊕</td>
<td>Identify types of data.</td>
</tr>
<tr>
<td>45 ⊕</td>
<td>Explain the ethical implications of collecting and maintaining data.</td>
</tr>
<tr>
<td>46 ⊕</td>
<td>Examine ethical issues related to marketing.</td>
</tr>
<tr>
<td>47 ⊕</td>
<td>Define privacy policy.</td>
</tr>
<tr>
<td>48 ⊕</td>
<td>Investigate privacy policies.</td>
</tr>
<tr>
<td>Examining Marketing Data</td>
<td></td>
</tr>
<tr>
<td>49 ⊕</td>
<td>Categorize marketing data within one or more of the seven marketing functions.</td>
</tr>
<tr>
<td>50 ⊕</td>
<td>Investigate how data is collected for one or more of the seven marketing functions.</td>
</tr>
<tr>
<td>51 ⊕</td>
<td>Differentiate how data is maintained and utilized.</td>
</tr>
<tr>
<td>Understanding Cybersecurity Risks in Marketing</td>
<td></td>
</tr>
<tr>
<td>52 ⊕</td>
<td>Identify cybersecurity threats and vulnerabilities within the seven functions of marketing.</td>
</tr>
<tr>
<td>53 ⊕</td>
<td>Analyze various cybersecurity risks in relation to marketing activities.</td>
</tr>
<tr>
<td>54 ⊕</td>
<td>Develop a marketing incident response plan.</td>
</tr>
<tr>
<td>Securing Data</td>
<td></td>
</tr>
<tr>
<td>55 ⊕</td>
<td>Describe key cybersecurity protective measures.</td>
</tr>
<tr>
<td>56 ⊕</td>
<td>Describe the elements of a business continuity plan in relation to a cybersecurity incident.</td>
</tr>
<tr>
<td>Investigating Marketing Cybersecurity Careers</td>
<td></td>
</tr>
<tr>
<td>57 ⊕</td>
<td>Explore educational pathways for emerging cybersecurity professionals.</td>
</tr>
<tr>
<td>58 ⊕</td>
<td>Identify potential employment barriers.</td>
</tr>
</tbody>
</table>
Curriculum Framework

Understanding Principles in Marketing and Cybersecurity

Task Number 39

Explain marketing concepts in a digital environment.

Definition

Explanation should include

- the marketing concept that businesses must create, identify, and use to satisfy customers' needs and wants to make a profit
- examples of how businesses profitably satisfy customers' needs and wants
- the influence of technological advances on establishing and maintaining customer relationships.

Process/Skill Questions

- How does customer orientation differ from company orientation?
- How has the marketing concept evolved over time?
- What are the qualities of a customer-driven business?
- How does an online presence satisfy customers’ needs and wants?
- What are the benefits to customers when businesses use the marketing concept?
- How does the marketing concept benefit businesses?

National MBAResearch Standards-Business Administration

Acquire foundational knowledge of customer/client/business behavior to understand what motivates decision-making.

Foster positive relationships with customers to enhance company image.
Understand marketing’s role and function in business to facilitate economic exchanges with customers.

Task Number 40

Explain the functions of marketing.

Definition

Explanation should include the following interrelated functions to business success and emphasize their importance within a digital environment:

- Channel management
- Marketing-information management
- Market planning
- Pricing
- Product/service management
- Promotion
- Selling

Process/Skill Questions

- How is each function related to digital marketing?
- How does each function affect a business?
- Which function has the greatest influence on a digital marketing business?
- How does product distribution differ for Internet-based businesses and for brick-and-mortar businesses?
- What are the similarities between marketing goods and marketing services?
- How are marketing functions interrelated? What role does each marketing function play in the overall digital environment?
- What might happen if a company neglects one of the functions?

National MBAResearch Standards-Business Administration

Understand marketing's role and function in business to facilitate economic exchanges with customers.

National MBAResearch Standards-Marketing

Acquire a foundational knowledge of product/service management to understand its nature and scope.
Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Acquire foundational knowledge of channel management to understand its role in marketing.

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Develop a foundational knowledge of pricing to understand its role in marketing.

Develop marketing strategies to guide marketing tactics.

Task Number 41

Relate marketing strategies to cybersecurity issues.

Definition

Relating strategies should include cybersecurity as the means of protecting digital marketing strategies, tools, data, and tactics.

Relating strategies should also include how cybersecurity concerns might influence promotion, engagement of customers, customer service, brand building, and sales.

Process/Skill Questions

- What role should digital marketing and social networking play in a business's marketing plan?
- Why would a brick-and-mortar business want to integrate technology, such as an application (app), to promote its business?
- How have digital and social media marketing changed methods for delivering messages to customers?

National MBAResearch Standards-Business Administration

Reinforce company's image to exhibit the company's brand promise.

Understand marketing's role and function in business to facilitate economic exchanges with customers.
National MBAResearch Standards-Marketing

Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Develop marketing strategies to guide marketing tactics.

Position company to acquire desired business image.

Task Number 42

Examine marketing trends with cybersecurity implications.

Definition

Examination should include

- explaining the cybersecurity implications of changes in marketing approaches
- identifying and reporting on trends, such as
  - digital display advertising
  - content/native marketing, storytelling
  - social media (e.g., boosted posts vs. paid social vs. page management)
  - email
  - digital messaging
  - reputation management (e.g., listening, monitoring)
  - streaming video (e.g., YouTube, Instagram Live, Facebook Live, Snapchat)
  - targeting (e.g., retargeting, behavioral, contextual, and abandon cart)
  - websites
  - digital commerce
  - search engine optimization (SEO)
  - search engine marketing (SEM)
  - app marketing
  - automated malicious systems as a marketing strategy (e.g., bots, script kiddies).

Process/Skill Questions

- How has digital marketing evolved?
- How is social media used in marketing?
- How have businesses embraced trends in social media?
- What are some examples of display advertising?
- How are content marketing and storytelling significant in creating a brand?
- Why are boosted posts used in digital marketing?
• How is live streaming changing marketing?
• How can promotional video be used to optimize exposure for businesses?

National MBA Research Standards-Business Administration

Acquire information to guide business decision-making.

Use social media to communicate with a business's stakeholders.

Utilize information-technology tools to manage and perform work responsibilities.

National MBA Research Standards-Marketing

Employ marketing-information to plan marketing activities.

Investigating Digital Privacy and Ethics

Task Number 43

Differentiate between ethical and unethical use of information resources.

Definition

Differentiation should include

• digital interaction (e.g., cyberbullying, ratings)
• netiquette (e.g., respecting confidentiality vs. WikiLeaks)
• criminal behaviors (e.g., unauthorized access of others' computer systems or data, ransomware, denial-of-service attacks)
• protecting data
• digital piracy.

Process/Skill Questions

• How can cyberbullying occur in marketing?
• What is netiquette, and why is it important?
• What is piracy? How does it affect businesses?
• How is digital piracy unethical? Is there ever a time when it is ethical?
• What is an example of unethical use of data?
• What are methods of respecting customer confidentiality?
• What are some examples of best practices for digital interaction?

National MBAResearch Standards-Business Administration

Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Understand the nature of business to show its contributions to society.

National MBAResearch Standards-Marketing

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Task Number 44

Identify types of data.

Definition

Identification should include defining

- **personally identifiable information (PII)**—any information about an individual, directly or indirectly, that suggests the identity of an individual either directly (i.e., name, address, Social Security number) or indirectly (i.e., gender, race, birthdate)
- **personal financial information (PFI)**—any financial information a financial company shares with affiliates (i.e., part of a customer’s financial group) or non-affiliates
- **non-public information (NPI)**—any PFI that a financial institution collects when providing a service to a customer; does not include information that is accessible to the public
- **personal health information (PHI)**—any information about a person's medical history collected by medical professionals (e.g., tests, lab results, insurance information)
- **digital footprint**—data collected about a person based upon one’s online activity. Data can include, but is not limited to
  - Internet protocol address
  - tweets
  - Facebook posts
  - browsers
  - websites visited
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- digital traces—defined by content (i.e., the message) and metadata (i.e., the context of the message)
- business data
- customer data
- intellectual property

**Process/Skill Questions**

- How can a digital footprint affect a person receiving a security clearance?
- How can PHI be affected if there is a cybersecurity breach?
- What is considered intellectual property?
- What measures can be taken to protect consumer data?
- How can a digital footprint and/or digital traces affect employment and/or college acceptance?

**National MBAResearch Standards-Business Administration**

Create and access databases to acquire information for business decision-making.

**National MBAResearch Standards-Marketing**

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Understand data-collection methods to evaluate their appropriateness for the research problem/issue.

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**Task Number 45**

**Explain the ethical implications of collecting and maintaining data.**

**Definition**

Explanation should include the following methods in

- collecting data (e.g., customer surveys, loyalty programs, wish lists, account registrations)
- processing data (e.g., data triangulation, data reidentification)
- maintaining data (e.g., clouds, servers, databases, data warehousing, data life-cycle).
Process/Skill Questions

- Whose responsibility is it to protect data during and after data collection?
- What is an unethical use of information resources?
- What is data triangulation, and why is it used?
- What is the current role of ethics surrounding data collection and use?
- What are the major ethical issues related to data collection and use?
- What ethical issues are associated with allowing data access to third parties?

National MBAResearch Standards-Business Administration

Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Create and access databases to acquire information for business decision-making.

Implement security policies/procedures to minimize chance for loss.

Maintain business records to facilitate business operations.

Understand the nature of business to show its contributions to society.

National MBAResearch Standards-Marketing

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Task Number 46

Examine ethical issues related to marketing.

Definition

Examination should include

- defining the term ethics
- explaining the difference between what is legal and what is ethical
- describing ethical issues, such as those relating to the protection of data, the use of data, and truth in advertising
- explaining the role of a privacy policy for digital and social media marketing.

Process/Skill Questions
• What are the differences between illegal and unethical?
• How is it possible for a marketing management decision to be legal but not ethical?
• What is the current role of ethics surrounding digital media?
• What are major ethical issues related to digital and social media marketing?
• What ethical issues are associated with mobile marketing?

**National MBAResearch Standards-Marketing**

Acquire a foundational knowledge of product/service management to understand its nature and scope.

Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Acquire foundational knowledge of channel management to understand its role in marketing.

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Develop a foundational knowledge of pricing to understand its role in marketing.

Understand responsibilities in marketing to demonstrate ethical/legal behavior.

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**Task Number 47**

**Define privacy policy.**

**Definition**

Definition should include a description and illustration of basic U.S. consumer rights, such as the right to be informed, to be safe, to choose, and to be heard. It should also relate these consumer rights to U.S. citizens’ right to privacy and to the health of the U.S. economy.

Definition should also include aspects of a privacy policy, which should specify how a company collects, processes, stores, and manages customer information in ways that prevent data from exposure to unauthorized persons or organizations.

**Process/Skill Questions**

• Why must marketers consider consumer rights?
• How do marketers inform consumers of product advisories and recalls?
• How do enterprises mediate consumer complaints?
• How can a company protect the privacy of consumers?
• When are privacy policies legally binding?
• Why is a privacy policy important?
• What is the difference between rights and ethics?
• What role should ethics play in consumer rights?

National MBA Research Standards-Business Administration

Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

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Task Number 48

Investigate privacy policies.

Definition

Investigation should include finding and examining privacy policies for various products and events. Some example products and events include

• sweepstakes
• social media
• medical forms
• website registrations
• online registrations
• apps
• cell phone agreements
• service agreements
• warranty agreements.

Process/Skill Questions

• What are current legislative decisions influencing privacy policies?
• What role does the U.S. government play in regulating Internet content?
• What influences do foreign government regulations have on Internet content and online business practices?

National MBA Research Standards-Business Administration
Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

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**Examining Marketing Data**

**Task Number 49**

**Categorize marketing data within one or more of the seven marketing functions.**

**Definition**

Categorization should include

- PII
- PFI
- NPI
- PHI
- digital footprint
- digital traces
- business data
- customer data
- intellectual property.

**Process/Skill Questions**

- What are the ethical security responsibilities that are inherent in collecting and maintaining marketing data?
- Who makes the ethical decision to acquire, use, and maintain marketing data?
- How is proper data stewardship applied?

**National MBAResearch Standards-Business Administration**

Understand marketing's role and function in business to facilitate economic exchanges with customers.
National MBA Research Standards - Marketing

Acquire a foundational knowledge of product/service management to understand its nature and scope.

Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Acquire foundational knowledge of channel management to understand its role in marketing.

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Develop a foundational knowledge of pricing to understand its role in marketing.

Develop marketing strategies to guide marketing tactics.

Task Number 50

Investigate how data is collected for one or more of the seven marketing functions.

Definition

Investigation should include

- providing data types that are and are not included in the seven categories
  - included (i.e., zip code, gender, age, personal interests, race, marital status)
  - not included (i.e., driver’s license and Social Security number)
- identifying appropriate data to collect for marketing purposes (e.g., buying a car vs. buying a TV).

Process/Skill Questions

- What are considerations for securing private data during collection?
- What is the security protocol for ensuring the security and integrity of data?
- How does the type of data influence how it should be secured during private collection?
National MBA Research Standards-Business Administration

Understand marketing's role and function in business to facilitate economic exchanges with customers.

National MBA Research Standards-Marketing

Acquire a foundational knowledge of product/service management to understand its nature and scope.

Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Acquire foundational knowledge of channel management to understand its role in marketing.

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Develop a foundational knowledge of pricing to understand its role in marketing.

Develop marketing strategies to guide marketing tactics.

Task Number 51

Differentiate how data is maintained and utilized.

Definition

Differentiation should include data

- at rest (e.g., storage, cloud vs. local)
- in transit (e.g., transmission, data encryption)
- being processed (e.g., memory, transaction)
- that is archived.

Process/Skill Questions

- What is the security protocol for securing marketing data?
- Who is responsible for the data during all stages of data utilization?
- What are some considerations for securing data during maintenance and use?
• How does the type of data influence how it must be secured?

National MBA Research Standards - Business Administration

Implement security policies/procedures to minimize chance for loss.

Understanding Cybersecurity Risks in Marketing

Task Number 52

Identify cybersecurity threats and vulnerabilities within the seven functions of marketing.

Definition

Identification should include hacking, social engineering, and misuse of data as it relates to the following seven functions of marketing:

• Channel management (e.g., distribution of material, services, raw materials, finished goods, altering flow of goods)
• Marketing-information management (e.g., deletion, corruption, theft, modification of data)
• Market planning (e.g., financing, misuse of intellectual property [IP], theft of IP)
• Pricing (e.g., undercut, price wars, bait-and-switch)
• Product/service management (e.g., altering planned new product line, theft of IP)
• Promotion (e.g., false advertising, brand management, awareness and identity, price fixing)
• Selling (e.g., sale dates, misinformation, false representation)

Teacher Resource: The 18 Biggest Data Breaches of the 21st Century, CSO

Process/Skill Questions

• How is cybersecurity a collective effort in business?
• What approaches should be considered to ensure all employees practice information security?
• What could happen to one’s business as a result of a security breach in any of the marketing areas?
• What are examples of security breaches in each of the marketing function areas (e.g., current events, news reports)?

National MBAResearch Standards-Marketing

Acquire a foundational knowledge of product/service management to understand its nature and scope.

Acquire a foundational knowledge of promotion to understand its nature and scope.

Acquire a foundational knowledge of selling to understand its nature and scope.

Acquire foundational knowledge of channel management to understand its role in marketing.

Acquire foundational knowledge of marketing-information management to understand its nature and scope.

Develop a foundational knowledge of pricing to understand its role in marketing.

Develop marketing strategies to guide marketing tactics.

Task Number 53

Analyze various cybersecurity risks in relation to marketing activities.

Definition

Analysis should include the results of activities discovered when investigating privacy policies and the effects on stakeholders, such as

• business partners
• consumers
• employees
• shareholders
• government
• local/regional/national/global society.

Analysis should also include organizations’ responses to cybersecurity risks, such as
• avoidance – change circumstances to avoid specific risk (e.g., don’t store credit card data to avoid data being compromised)
• control – take steps to limit likelihood of a threat (e.g., use a corporate firewall to limit accessibility to servers that might be targeted by hackers)
• acceptance – decide that the cost of reacting to attacks is cheaper than trying to prevent them (e.g., credit card companies budget for replacing a certain percentage of compromised credit cards because this is more budgetary feasible than preventing all compromise)
• transference – outsource the risk to a third party (e.g., purchase car insurance to transfer the financial risk of being involved in an accident).

Teacher Resources:
Marketers Fighting Cybercrime: How You Can Protect Your Brand, Marketing Technology Insights

Process/Skill Questions

• What are recent examples of cybersecurity breaches with data at rest, data in transit, and data being processed?
• How do cybersecurity risks affect relationships in business?
• How should a marketer respond to different stakeholders when a cybersecurity breach occurs?
• How can marketers offer stakeholders peace of mind regarding the cybersecurity efforts of a business?
• What are some key risk issues for small business owners?

National MBAResearch Standards-Business Administration

Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

Task Number 54

Develop a marketing incident response plan.

Definition

Development could include a case study of items such as
• click fraud
• advertising security
• intellectual property infringement
• attack on brand
• data breach
• other current events.

Development should also include understanding the following incident response steps:

• Preparing for the incident
• Identifying the incident
• Containing the incident
• Investigating the incident
• Eradicating the threat
• Recovering from the incident

Teacher resources:
Five Best Practices for Your Incident Response Plan, Exabeam;
The Five Benefits of an Incident Response Plan, Hitachi

Process/Skill Questions

• What is an incident response plan, and what does it address?
• Why is a marketing incident response plan an important strategy for organizations?
• Who should be involved in developing a marketing incident response plan?
• When should an incident response plan be put into action?
• What is an incident response cycle?
• What is incident remediation?
• What does an incident response team do?

National MBA Research Standards-Business Administration

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

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Securing Data

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Task Number 55
Describe key cybersecurity protective measures.

Definition

Description should include

- operating system and software (e.g., patch management, application life cycles, updates)
- network security (e.g., firewalls, intrusion and detection systems)
- physical security (e.g., locks, controlled access, cameras, security, guards, fingerprint)
- cryptography (e.g., digital signatures, data encryption, Blockchain)
- human element (e.g., training against social engineering/phishing, password management).

Teacher resources:
Incident Response Plan: Six Steps for Responding to Security Incidents, Exabeam; Five Reasons Why Marketing Needs to Care About Cybersecurity, Bromium

Process/Skill Questions

- What are the most important cybersecurity measures for a business?
- Why should marketing professionals be well-versed in key cybersecurity protection measures?
- How can physical security measures help a business with cybersecurity efforts?
- How difficult are cybersecurity measures to implement?
- Who are the key personnel involved in cybersecurity protective measures?

National MBAResearch Standards-Business Administration

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

Use information literacy skills to increase workplace efficiency and effectiveness.

Utilize information-technology tools to manage and perform work responsibilities.

Task Number 56

Describe the elements of a business continuity plan in relation to a cybersecurity incident.

Definition

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Description should include

- small vs. business-wide
- future expansion
- data loss or theft
- data modification
- acts of nature.

Teacher resources:
Why Cybersecurity Matters to Your Business, Forbes;

Process/Skill Questions

- What is a business continuity plan?
- What is the goal of a business continuity plan?
- How should business influence be evaluated with a cybersecurity incident, recovery strategy, a plan development, and testing and evaluation?
- What types of losses should be considered in a cybersecurity incident? (See suggested worksheet PDF).
- When should the business continuity plan be reviewed?

National MBAResearch Standards-Business Administration

Comply with security rules, regulations, and codes (e.g., property, privacy, access, confidentiality) to protect customer and company information, reputation, and image.

Develop policies/procedures to protect workplace security.

Implement security policies/procedures to minimize chance for loss.

Record information to maintain and present a report of business activity.

Utilize planning tools to guide organization's/department's activities.

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Investigating Marketing Cybersecurity Careers

Task Number 57
Explore educational pathways for emerging cybersecurity professionals.

Definition

Exploration should include

- online resources that specialize in providing this type of information (e.g., O*Net, Bureau of Labor Statistics’ Occupational Outlook Handbook, Virginia Education Wizard, CyberSeek, CNA’s Highly Ranked Cybersecurity Programs: Top Cybersecurity Schools for 2019, Cybersecurity Higher Education: The Top Cybersecurity Colleges and Degrees in 2019)
- common pathways (i.e., internships, community college, or four-year university) based on industry requirements
- academic goals (e.g., strong mathematics skills)
- career and technical education goals (e.g., industry certifications and licensure)
- postsecondary options (i.e., internships, community college, technical institutes, or four-year universities).

Process/Skill Questions

- What are the current employment trends in cybersecurity?
- What resources are available for researching emerging educational pathways for cybersecurity professionals?
- What online resources are available to assist an individual in determining whether a career in cybersecurity is a good match?
- What hard and soft skills, aptitudes, and interests are necessary for employment as a cybersecurity professional?
- What are the most common types of jobs in cybersecurity? In what industries are they found?
- What are the advantages of identifying a wide variety of career opportunities in cybersecurity?
- Why is it important to be able to have problem- and puzzle-solving skills for cybersecurity and homeland security professionals?
- What industry certifications are available?

National MBAResearch Standards-Business Administration

Implement job-seeking skills to obtain employment.

Participate in career planning to enhance job-success potential.

Utilize career-advancement activities to enhance professional development.
Task Number 58

Identify potential employment barriers.

Definition

Identification could include

- unethical activity (e.g., false reviews, cyberbullying)
- illegal activity (e.g., unauthorized hacking, criminal conviction)
- legal but socially undesirable activities (e.g., infidelity, substance abuse)
- socioeconomic
- geographic
- cultural.

Process/Skill Questions

- What is the CIA triad?
- What information do cyber criminals steal, and what do they do with the stolen information?
- What is cyberbullying?
- What are cyberbullying roles?
- What are the different kinds of hackers (e.g., white, black, grey)?
- When is hacking legal?
- What are examples of socioeconomic factors?
- Why is cybersecurity culture so important to organizational success?
- What regions continue to dominate the cybersecurity business?

National MBAResearch Standards-Marketing

Understand responsibilities in marketing to demonstrate ethical/legal behavior.

<table>
<thead>
<tr>
<th>SOL Correlation by Task</th>
<th>English: 11.5, 12.5</th>
<th>History and Social Science: VUS.14, WHII.14</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Explain the functions of marketing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relate marketing strategies to cybersecurity issues.</td>
<td>English: 11.5, 12.5</td>
<td></td>
</tr>
<tr>
<td>Examine marketing trends with cybersecurity implications.</td>
<td>English: 11.5, 12.5</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Core Areas</td>
<td>English Levels</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Differentiate between ethical and unethical use of information resources.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.5, 12.5</td>
</tr>
<tr>
<td>Identify types of data.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.3, 11.5, 12.3, 12.5</td>
</tr>
<tr>
<td>Explain the ethical implications of collecting and maintaining data.</td>
<td>Mathematics: COM.7, PS.8*</td>
<td>11.5, 12.5</td>
</tr>
<tr>
<td>Examine ethical issues related to marketing.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.3, 11.5, 12.3, 12.5</td>
</tr>
<tr>
<td>Define <em>privacy policy</em>.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.3, 12.3</td>
</tr>
<tr>
<td>Investigate privacy policies.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.5, 11.8, 12.5, 12.8</td>
</tr>
<tr>
<td>Categorize marketing data within one or more of the seven marketing functions.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.6, 12.6</td>
</tr>
<tr>
<td>Investigate how data is collected for one or more of the seven marketing functions.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.5, 11.8, 12.5, 12.8</td>
</tr>
<tr>
<td>Differentiate how data is maintained and utilized.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.5, 12.5</td>
</tr>
<tr>
<td>Identify cybersecurity threats and vulnerabilities within the seven functions of marketing.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.1, 12.1</td>
</tr>
<tr>
<td>Analyze various cybersecurity risks in relation to marketing activities.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.1, 12.1</td>
</tr>
<tr>
<td>Develop a marketing incident response plan.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.1, 12.1</td>
</tr>
<tr>
<td>Describe key cybersecurity protective measures.</td>
<td>History and Social Science: VUS.14, WHII.14</td>
<td>11.5, 12.5</td>
</tr>
</tbody>
</table>
DECA Inc. Information

DECA, the co-curricular student organization for Marketing, provides many opportunities through its program of work for students to apply the knowledge, skills, and processes learned in a variety of courses. The purposes of DECA's program of competitive events are as follows:

- To contribute to the development of skills necessary for careers in marketing, merchandising, management, and entrepreneurship
- To evaluate student achievement of the skills through careful measurement devices (performance indicators)
- To provide opportunities for student and team recognition
- To provide constructive avenues for individual or team expression, initiative, and creativity
- To motivate students to assume responsibility for self-improvement and self-discipline
- To provide a vehicle for students to demonstrate (via performance indicators) their acquired skills through individual or team activities
- To assist students in acquiring a realistic self-concept through individual and team activities
- To help students participate in an environment of cooperation and competition
- To provide visibility for the educational goals and objectives of marketing education.

For additional information about the student organization, contact DECA Inc., 1908 Association Drive, Reston, VA 20191, phone (703) 860-5000, FAX (703) 860-4013. See the DECA Inc. home page at http://www.deca.org and the Virginia DECA home page at http://www.vadeca.org.

Common Skills Developed When Participating in DECA Events

- Communication skills—The ability to exchange information and ideas with others through writing, speaking, reading, or listening
- Analytical skills—The ability to derive facts from data, findings from facts, conclusions from findings, and recommendations from conclusions
- Critical thinking and problem-solving skills
- Production skills—The ability to take a concept from an idea and make it real
• Teamwork—The ability to plan, organize, and conduct a group project
• Priorities/time management—The ability to determine priorities and manage time commitments
• Assessment skills—The ability to evaluate presentations

Related DECA Inc. Competitive Events

CTE student organization information correlates to course content. These DECA, Inc. competitive events available in Virginia enable students to apply and practice tasks they have mastered within the course. Other events may be applicable upon instructor discretion. Refer to the Chapter Management Guide for more information.

Teacher Resource

AFA CyberPatriot the National Youth Cyber Education Program created by the Air Force Association to inspire K-12 students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future. At the core of the program is the National Youth Cyber Defense Competition, the nation's largest cyber defense competition that puts high school and middle school students in charge of securing virtual networks.
Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- College and Work Readiness Assessment (CWRA+)
- IC3 Digital Literacy Certification Examination
- IT Fundamentals+ Certification Examination
- National Career Readiness Certificate Assessment
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.

- Cybersecurity Fundamentals (6302/36 weeks)
- Cybersecurity in Marketing (8126/36 weeks)

Career Cluster: Arts, Audio/Video Technology and Communications

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing Arts</td>
<td>Cinematographer</td>
</tr>
<tr>
<td></td>
<td>Costume Designer</td>
</tr>
<tr>
<td></td>
<td>Lighting Designer</td>
</tr>
<tr>
<td></td>
<td>Technical Director</td>
</tr>
<tr>
<td></td>
<td>Video, Film Editor</td>
</tr>
<tr>
<td>Visual Arts</td>
<td>Commercial Photographer</td>
</tr>
<tr>
<td></td>
<td>Fashion Designer</td>
</tr>
<tr>
<td></td>
<td>Fashion Illustrator</td>
</tr>
<tr>
<td></td>
<td>Graphic Designer</td>
</tr>
<tr>
<td></td>
<td>Illustrator</td>
</tr>
<tr>
<td></td>
<td>Media Planner, Buyer</td>
</tr>
<tr>
<td></td>
<td>Textile Designer</td>
</tr>
</tbody>
</table>

Career Cluster: Hospitality and Tourism

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lodging</td>
<td>Chief Engineer</td>
</tr>
<tr>
<td></td>
<td>Front Office Manager</td>
</tr>
<tr>
<td></td>
<td>Lodging Manager</td>
</tr>
<tr>
<td></td>
<td>Marketing Manager</td>
</tr>
<tr>
<td>Recreation, Amusements and Attraction</td>
<td>Advertising and Promotions Manager</td>
</tr>
<tr>
<td></td>
<td>Meeting and Convention Planner</td>
</tr>
</tbody>
</table>
### Career Cluster: Hospitality and Tourism

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurants and Food and Beverage Services</td>
<td>Sports Promoter</td>
</tr>
<tr>
<td></td>
<td>Destination Manager</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
</tr>
<tr>
<td></td>
<td>Facilities Manager</td>
</tr>
<tr>
<td></td>
<td>Franchisee</td>
</tr>
<tr>
<td>Travel and Tourism</td>
<td>Director of Convention and Visitors Bureau</td>
</tr>
<tr>
<td></td>
<td>Director of Tourism Development</td>
</tr>
<tr>
<td></td>
<td>Meeting and Convention Planner</td>
</tr>
<tr>
<td></td>
<td>Travel Agent</td>
</tr>
</tbody>
</table>

### Career Cluster: Marketing

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Communications</td>
<td>Advertising Account Executive</td>
</tr>
<tr>
<td></td>
<td>Advertising and Promotions Manager</td>
</tr>
<tr>
<td></td>
<td>Art Director</td>
</tr>
<tr>
<td></td>
<td>International Merchandising Manager</td>
</tr>
<tr>
<td></td>
<td>Marketing Communication Manager</td>
</tr>
<tr>
<td></td>
<td>Marketing Manager</td>
</tr>
<tr>
<td></td>
<td>Public Information Director</td>
</tr>
<tr>
<td></td>
<td>Web Developer</td>
</tr>
<tr>
<td>Marketing Management</td>
<td>Advertising and Promotions Manager</td>
</tr>
<tr>
<td></td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
</tr>
<tr>
<td></td>
<td>Franchisee</td>
</tr>
<tr>
<td></td>
<td>General Manager</td>
</tr>
<tr>
<td></td>
<td>Internet Entrepreneur</td>
</tr>
<tr>
<td></td>
<td>Marketing Communication Manager</td>
</tr>
<tr>
<td></td>
<td>Public Information Director</td>
</tr>
<tr>
<td></td>
<td>Public Relations Manager</td>
</tr>
<tr>
<td>Marketing Research</td>
<td>Database Administrator</td>
</tr>
<tr>
<td></td>
<td>Market Research Analyst</td>
</tr>
<tr>
<td>Merchandising</td>
<td>Merchandise Manager</td>
</tr>
<tr>
<td></td>
<td>Operations Manager</td>
</tr>
<tr>
<td>Professional Sales</td>
<td>Account Executive</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
</tr>
<tr>
<td></td>
<td>Property, Real Estate, and Community Association Manager</td>
</tr>
</tbody>
</table>