Applications of ICTs

DR JENNY PANGE

PROFESSOR, DEAN OF SCHOOL OF EDUCATION

DIRECTOR OF LAB OF NEW TECHNOLOGIES AND DISTANCE LEARNING

DEPARTMENT OF EARLY CHILDHOOD EDUCATION

UNIVERSITY OF IOANNINA – GREECE (JPAGGE@UOI.GR)

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Understanding Information and Communication Technologies (ICTs)

1. **Definition**: ICTs include any communication device or application, such as radio, television, cell phones, computer and network hardware, satellite systems, etc.
2. **Services & Appliances**: Video conferencing and distance learning are among the services provided by ICTs.
3. **Usage**: ICTs transmit, store, create, share, or exchange information.
4. **Examples**: Personal computers, smartphones, digital television, email, and robots..

Source: https://en.wikipedia.org/wiki/Information_and_communications_technology).

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Advantages of Digitalization

- Easy access to vast amounts of information.
- Immediate and easy communication.
- Multitasking
- Establishment of a universal perspective.
- Elimination of time and space constraints.
- Simplified collaboration and content sharing.
- Better optimization of time through task automation.
- Digital learning opens programs to otherwise excluded students.

Source: Olçum, G. and Gülova, A.A. (2023), "Digitalization and Generation Z: Advantages and Disadvantages of Digitalization ", Akkaya, B. and Tabak, A. (Ed.) Two Faces of Digital Transformation, Emerald Publishing Limited, Bingley, pp. 31-46. https://doi.org/10.1108/978-1-83753-096-020231003

Online ICT tools

1. **Collaboration Tools**: Platforms like Microsoft Teams, Google Workspace, and Slack enable real-time collaboration and communication among teams.
2. **Learning Management Systems (LMS)**: Tools such as Moodle, Blackboard, and Canvas allow educators to manage and deliver educational content.
3. **Cloud Storage Services**: Services like Google Drive, Dropbox, and OneDrive provide online storage, making file sharing and collaboration more efficient.
4. **Project Management Tools**: Applications like Trello, Asana, and Jira help in organizing, tracking, and managing projects.
5. **Video Conferencing Tools**: Platforms like Zoom, Microsoft Teams, and Google Meet facilitate virtual meetings and webinars

Source: F. Smrčka, Z. Dostálová, H. Vojáčková (2023) ANALYSING ONLINE TOOLS USED DURING COVID-19 PANDEMIC AND THE POTENTIAL OF THEIR USE FOR STANDARD TEACHING, INTED2023 Proceedings, pp. 1511-1520. doi: 10.21125/inted.2023.0433

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ICT tools for statistical analysis

1. **Data Collection**: Tools like Google Forms, SurveyMonkey, and Qualtrics can be used to gather data efficiently and systematically.
2. **Data Analysis**: Software such as R, Python (with libraries like Pandas, NumPy, and SciPy), and SPSS are commonly used for analyzing and interpreting data.
3. **Hypothesis Testing**: Statistical software like Minitab, Stata, and SAS provide robust methods for hypothesis testing.
4. **Presentation of Results**: Tools like Microsoft Excel, Tableau, and Google Data Studio can be used to visualize data and present results in a clear and understandable manner.

Source: Ali, M. (2023). Analytical Tools Used in Information Management, Digital Business, ICT and Information Science. In Information Systems Research: Foundations, Design and Theory (pp. 173-185). Cham: Springer International Publishing.

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ICT tools for data collection

1. **Quantitative and Qualitative Tools:** GoSpotCheck for real-time information and instant analysis, QuickTapSurvey for creating surveys and data gathering campaigns, and Repsly Mobile CRM for field management.
2. **Survey Tools:** Online tools for electronically collecting responses from a target audience.
3. **Questionnaire Tools:** PISA Questionnaire Platform for designing and delivering questionnaires, and ICT Familiarity Questionnaire for PISA 2018 for gathering information about students' familiarity with ICT.
4. **Case Study Tools:** Case Studies on Open Innovation in ICT for innovative ICT and ICT-enabled companies, and Digital Tools and Strategies in COVID-19 Infodemic Response for responding to the COVID-19 infodemic.

Source: 1) https://teaching.cornell.edu/learning-technologies/assessment-tools/survey-tools
2) https://www.oecd.org/pisa/data/pisa2018technicalreport/PISA2018%20TecReport-Ch-17-BQ-Design.pdf

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ICT and innovation

- **Infrastructure Innovation**: Cloud computing and IoT revolutionize business operations.
- **Organizational Process Innovation**: Improved efficiency and effectiveness in organizations.
- **E-Government**: ICT integration transforms public service delivery.
- **IoT**: Drives innovation and development across various sectors.
- **Cloud Computing**: Key driver of innovation in the digital age.
- **Distance Learning**: ICT reshapes education through distance learning opportunities.

Source: 1) https://www.springer.com/journal/41062
2) https://digital-strategy.ec.europa.eu/en/policies/egovernment

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ICT tools for Digital material

1. **Computers / Smartphones:** Devices that are the primary means of accessing and interacting with digital materials. Tools related to these devices include operating systems, web browsers, and specific applications for accessing digital content.
2. **E-mail:** A crucial communication tool in the digital world. Services like Gmail, Outlook, and Yahoo Mail are commonly used.
3. **Digital Games:** These can be used for both entertainment and educational purposes. Platforms like Steam, Epic Games Store, and educational sites like ABCmouse offer various digital games.
4. **Digital E-Learning Material:** E-books, educational videos, online courses, etc. Resources for these materials can be found on platforms like Khan Academy, Coursera, Udemy, and YouTube Education.

Source: 1) https://www.cambridge.org/elt/blog/2022/04/29/seven-best-digital-teaching-tools-online-esl-classroom/

2) https://link.springer.com/article/10.1007/s11528-021-00671-z

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Overview of distance learning technologies

Print	Voice/Audio	Computer	Video
• Textbooks • Study guides • Fax	• Voicemail • Audio conferences • Radio	• E-mail • Chats • Smart phones	• Video conferences • Satellite delivery

Technologies used are divided into 4 categories

(Sourcehttps://fcit.usf.edu/distance/chap5.htm)

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ICT and branches of science

1. **Applied Sciences:** Mathematics, machine sciences, and computer science for problem-solving, data analysis, and simulations
2. **Social Sciences:** Data collection, statistical analysis, and economic modeling
3. **Natural Sciences:**
   - **Life Sciences:** Bioinformatics, genomics, and medical imaging
   - **Physical Sciences:** Data analysis, theoretical calculations, and simulations in physics; molecular modeling and computational chemistry in chemistry; climate modeling and Geographic Information Systems (GIS) in earth sciences

Source: 1) https://link.springer.com/chapter/10.1007/978-3-030-12895-6_2
2) https://www.mdpi.com/2227-7102/13/3/231

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The UNESCO Vision

UNESCO integrated ICTs into learning process
- to promote equality and access to education.

We use ICT tools for

1. **teaching**
2. **learning**
3. **management**
4. **Systems' assessment**
5. **collaboration platforms**
   (*https://en.unesco.org/covid19/educationresponse*).

Applications of ICTs for sustainable development

- ICTs are used for:
  - Automation and information (reduce costs), transformation, infrastructure (completive advantage)
  - To support sustainability in organizations (clean products, efficient consumption, employee satisfaction)
- ICTs support: planet – people – economy/profit

Source 1) https://www.itu.int/en/sustainable-world/Pages/default.aspx
2) https://iccwbo.org/news-publications/icc-rules-guidelines/digitalisation-for-people-planet-and-prosperity

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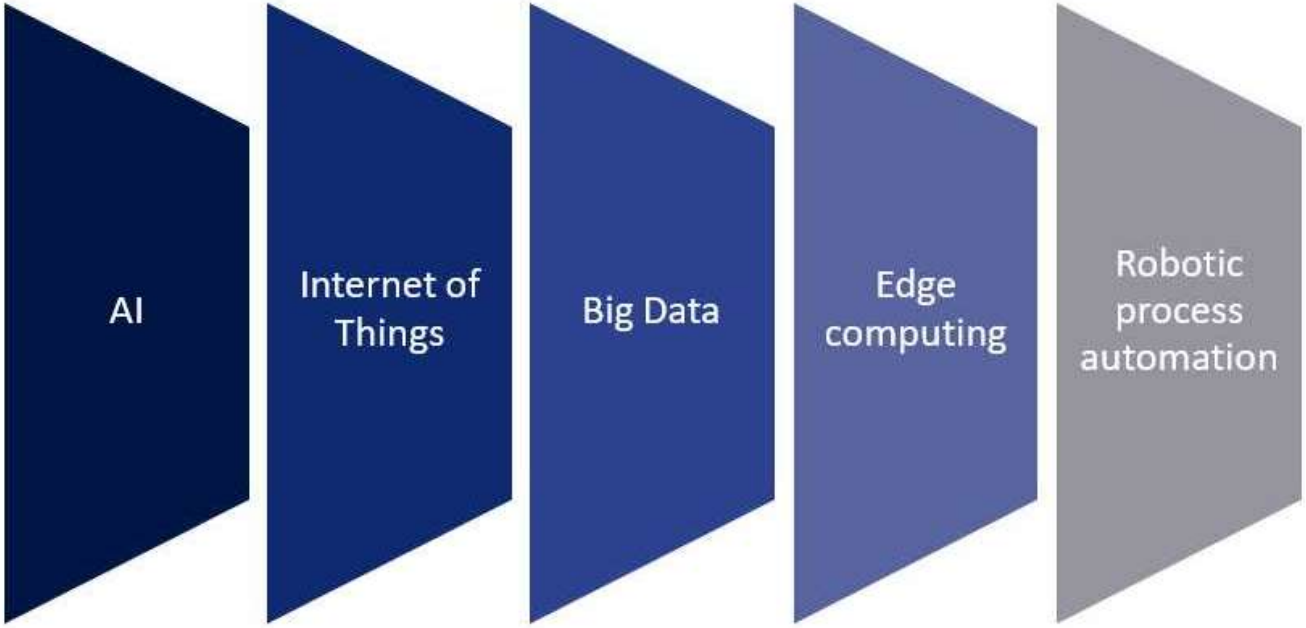
Sustainable technology growth



Environmental impact of ICTs

- Bioeconomic models are involved in the control of energy systems
  - Generation
  - Transmission
  - Storage
  - Investment
- ICTs support sustainable capabilities:
  - Novel machine learning, new methods of setting experiments, new energy materials, exchange of information, games for learning

Source: 1) https://sustainabledevelopment.un.org/index.php?page=view&type=20000&nr=579&menu=2993
2) https://link.springer.com/article/10.1057/s41287-021-00369-1

Some applications of ICTs for business (1)

- **Communication and Collaboration:**
  - Use email, messaging, and video conferencing for efficient communication.
- **Enterprise Resource Planning (ERP):**
  - Integrate business processes and centralize data with ERP systems.
- **Customer Relationship Management (CRM):**
  - Manage customer data and automate sales and support processes.
- **E-commerce and Online Presence:**
  - Establish online stores, utilize digital marketing, and enhance customer engagement.

Source: Dassanayake, M. R., & Krishnanunni, M. A. (2023). THE EFFECTIVE IMPLEMENTATION OF ICT TOOLS IN BUSINESS. The Online Journal of Distance Education and e-Learning, 11(1)

Some applications of ICTs for business (2)

- **Data Analytics:**
  - Utilize business intelligence and predictive analytics for informed decisions.
- **Cloud Computing:**
  - Store, back up data securely, and access software through the cloud.
- **Mobile Technologies:**
  - Develop mobile apps for internal use or customer interaction.
- **Supply Chain Management:**
  - Optimize inventory and logistics using ICTs

Source: Subhashish Gupta, The interaction between technology, business environment, society, and regulation in ICT industries, IIMB Management Review, Volume 34, Issue 2, 2022, Pages 103-115, ISSN 0970-3896, https://doi.org/10.1016/j.iimb.2022.07.001

Some applications of ICTs for business (3)

- **Cybersecurity:**
  - Ensure network security and data encryption to protect against cyber threats.
- **Virtualization:**
  - Improve resource utilization and streamline management through virtualization.
- **Human Resource Management:**
  - Implement employee portals and e-learning platforms for HR tasks and training.
- **Artificial Intelligence (AI) and Automation:**
  - Use chatbots and automation to enhance customer service and streamline tasks

Source: Longo, F., Mirabelli, G., Solina, V., Belli, L., Abdallah, C. B., Ben-Ammar, O., ... & Zacharewicz, G. (2023). An overview of approaches and methodologies for supporting smallholders: ICT tools, blockchain, business models, sustainability indicators, simulation models. Procedia Computer Science, 217, 1930-1939. https://doi.org/10.1016/j.procs.2022.12.393

The Impact of ICTs on Blogging Strategies

1. **Integrated Content Distribution:**
   - ICT tools for the creation, distribution, and optimization of blog content.
   - Advanced analytics refine and tailor content strategies for optimal reach.
2. **Personalized Engagement through ICTs:**
   - ICT solutions tailor content delivery based on user preferences and behavior.
   - AI algorithms for personalized recommendations, enhancing user engagement.
3. **Innovative Multimedia Integration:**
   - ICT technologies incorporate multimedia elements into blogs.
   - Interactive features such as embedded videos, infographics, and dynamic content.
4. **Data-Driven Blogging Identity:**
   - ICT tools for consistent branding and visual representation across blogging platforms.
   - Data analytics to understand and align with the evolving digital identity of the target audience.

Source: Gibbs, J. L., & Navick, N. (2023). Bringing technological affordances into virtual work. Handbook of Virtual Work, 3. http://dx.doi.org/10.4337/9781802200508

The Transformative Role of ICTs in Social Media Marketing :

1. **Integrated Web Traffic Optimization:**
   - ICT analytics for precise, data-driven strategies to optimize website traffic.
2. **Conversion Enhancement Strategies:**
   - ICT solutions for targeted advertising and personalized content.
   - AI-driven chatbots enhance customer engagement and drive conversion rates.
3. **Brand Awareness Amplification:**
   - ICT technologies to create immersive, shareable content.
   - Augmented reality (AR) or virtual reality (VR) for crafting memorable brand experiences, elevating brand awareness.
4. **Strategic Brand Identity Crafting:**
   - ICT tools for consistent visual branding and representation.
   - Data analytics to thoroughly understand and align with the digital identity of the target audience.

Source: Dassanayake, M. R., & Krishnanunni, M. A. (2023). THE EFFECTIVE IMPLEMENTATION OF ICT TOOLS IN BUSINESS. The Online Journal of Distance Education and e-Learning, 11(1).

The Role of ICTs in Web Analytics (1)

1. **Holistic Data Synthesis:**
   - Seamless integration of diverse data streams through ICT tools to achieve a comprehensive overview of web performance.
   - Employment of ICT-driven data integration methodologies to derive actionable insights from various online channels.
2. **Real-time Analytics for Informed Decision-Making:**
   - Implementation of advanced ICT analytics tools for continuous, real-time website performance monitoring.
   - Utilizing live dashboards and alerts to facilitate agile decision-making based on up-to-the-moment data.

Source: Ayanso, A. (Ed.). (2014). Harnessing the power of social media and web analytics. IGI Global

The Role of ICTs in Web Analytics (2)

1. **Precision in User Journey Mapping:**
   - ICT-powered analytics to meticulously map user journeys and interactions.
   - Utilization of behavioral analytics for crafting personalized user experiences and targeted content delivery.
2. **Predictive Analytics for Proactive Optimization:**
   - Implementation of predictive modeling through ICT tools to forecast trends and anticipate user behavior.
   - Utilization of predictive insights for strategic decision-making, enabling proactive optimization strategies and continuous enhancement of online presence.

Source: Ayanso, A. (Ed.). (2014). Harnessing the power of social media and web analytics. IGI Global

Types of websites

Service-Based website

E-commerce website

Bespoke functionality website

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Educational games

- serious games
- Virtual reality
- Artificial Intelligence and games
- Offline -online

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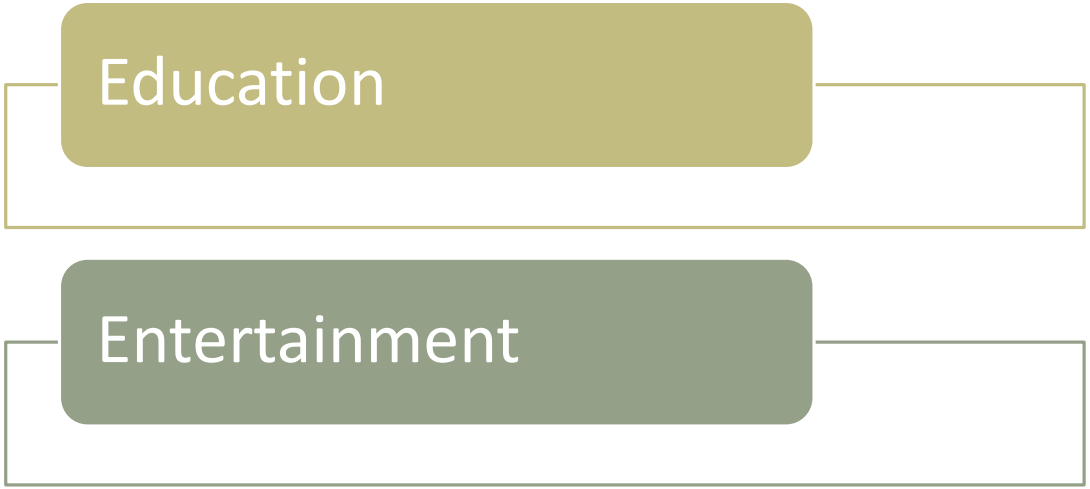
Edutainment



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Online tools for web pages construction

1) Ease of Use:
- Intuitive interfaces eliminate the need for extensive coding skills.
- Effortlessly initiate projects with user-friendly platforms.

2) Cost-Effective Solutions:
- Complimentary basic versions make web development financially viable.
- Premium features, available for a fee, enhance websites with advanced functionalities.

3) Skill Enhancement:
- Platforms serve as educational tools, allowing students to cultivate technical skills.
- Practical, hands-on experience enhances comprehension and proficiency.

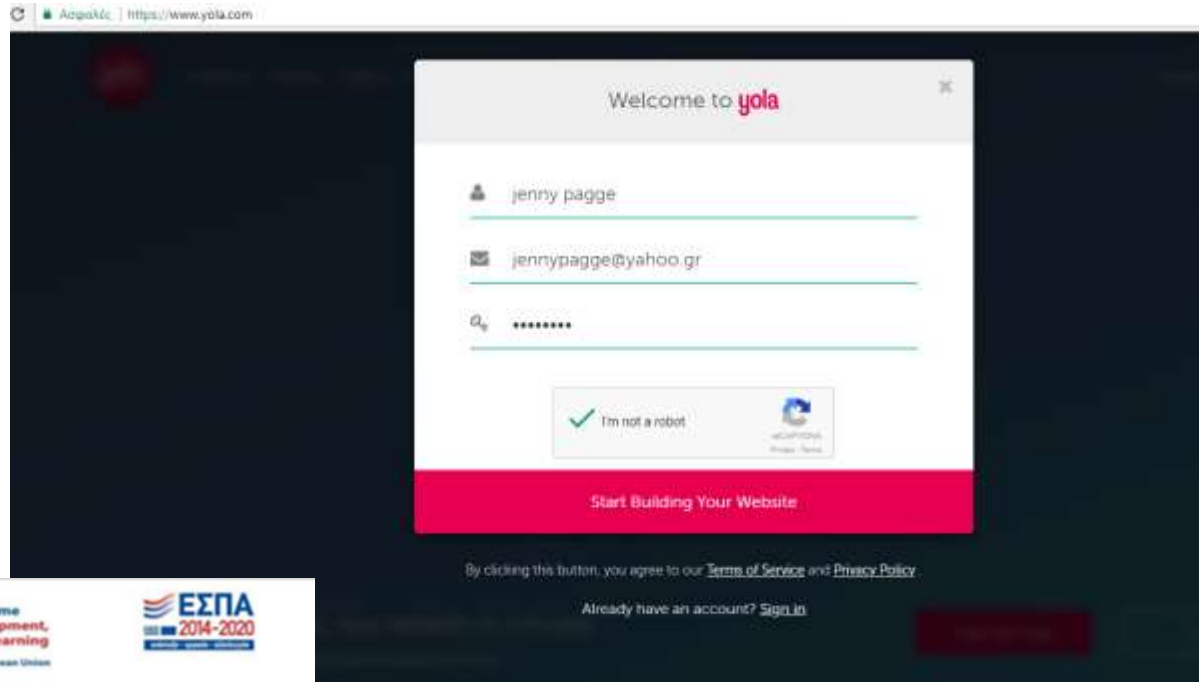
Source: McManus, S. (2023). Web design in easy steps. In Easy Steps Limited

Exemplary Tools:

1. **Wix:**
   - Free, intuitive website builder with premium plans for advanced features.
2. **WordPress:**
   - Open-source platform with a robust plugin ecosystem, suitable for various skill levels.
3. **Weebly:**
   - User-centric website builder, ideal for e-commerce, with premium plans for additional features.

Source: Blancaflor, E. B., & Samonte, S. A. (2023). An Analysis and Comparison of Proprietary and Open-Source Software for Building E-commerce Website: A Case Study. Journal of Advances in Information Technology, 14(3). doi: 10.12720/jait.14.3.426-430

Website design example with Yola



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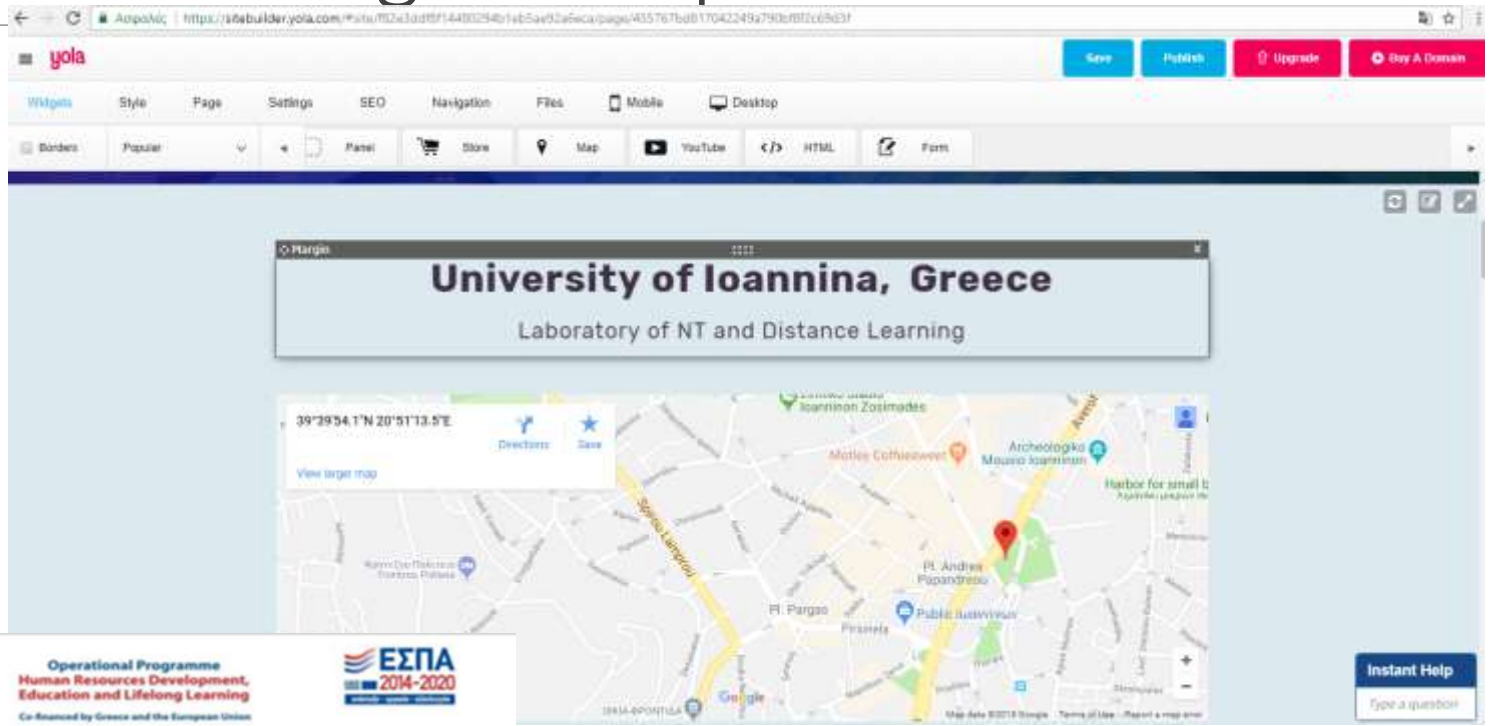
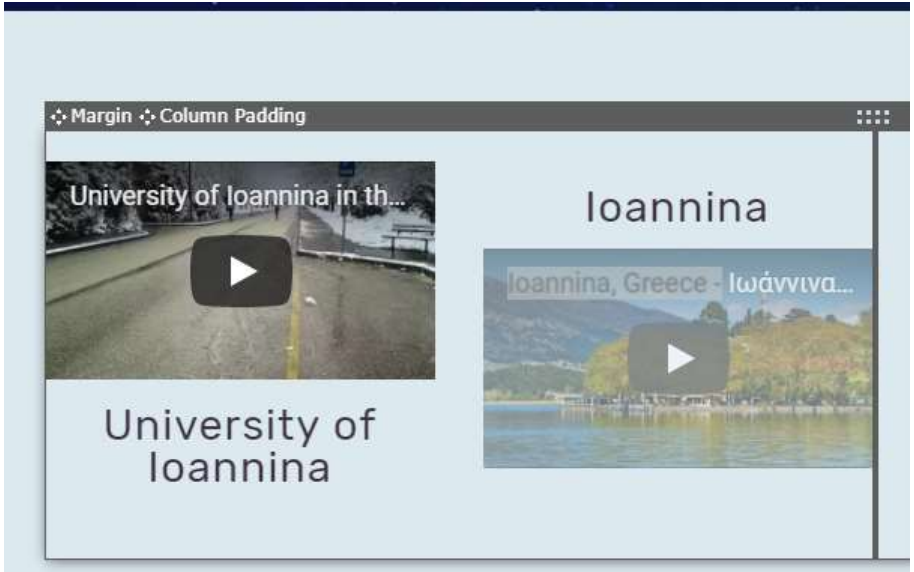
Website design example with Yola



Website design example with Yola

Adding widgets



Example: Creation of a web page in WIX.com

Creation of a web site for a school

Strong points of the school need to be considered

Needs to be appealing for children and parents

Website Initialization

1. **Web Host Selection**
   - A reliable web host must be chosen for the website's foundation.
2. **Account Access**
   - The 'Sign Up' option is utilized (or log in if an account already exists), followed by the activation of the 'Sign Up' button.
3. **Template Selection and Editing**
   - The initiation of the website creation process begins with the selection of 'View,' where one of the templates is chosen, and 'Edit' is pressed for customization.
4. **Hosting** is the cornerstone of an effective website

Source: https://www.techradar.com/news/what-is-web-hosting-and-why-do-you-need-it

The title of our project is important

1. **Project Focus:** Emphasizing the importance of a compelling title to effectively convey the project's purpose and goals.
2. **Example:** "Crafting an Engaging Presentation on School Ideals for Student Groups"
3. **Website Development:** Identifying a suitable host for the project website to ensure optimal performance and accessibility.
4. **Customer-Centric Approach:** Tailoring the website content to align with the preferences and needs of our target audience.
5. **Key Actions:**
    1. Secure a reliable hosting provider.
    2. Conduct thorough customer research for precise content alignment.
6. **Strategic Alignment:**
    1. Aligning the project strategy with both presentation and website development for cohesive and impactful communication.

Source: 1) https://inkforall.com/hey-ink-tool/proposal-generator/examples-of-proposal-titles/
2) https://analysistabs.com/project/title/

Advantages of using WIX.com

1. **User-Friendly Design:** Empowers students with intuitive tools, minimizing the need for extensive coding skills.
2. **Template Variety:** Provides diverse industry-specific templates, guiding students in professional website creation.
3. **Mobile-Optimized Development:** Ensures seamless cross-device experiences, automatically optimizing for mobile outreach.
4. **Budget-Friendly Choice:** Chosen for cost-effectiveness, offering reliable hosting, scalability, and 24/7 support for student projects.

Sources: 1) https://outvio.com/blog/wix-advantages-and-disadvantages/
2) https://www.enzuzo.com/blog/pros-and-cons-of-using-wix

Disadvantages of Web Hosting

1. **Complex Management:** Hosting requires intricate management, potentially posing challenges for users without technical expertise.
2. **Potential Downtime:** The inherent risk of downtime may impact website accessibility, affecting user experience and credibility.
3. **Security Concerns:** Web hosting vulnerabilities may expose websites to security threats, demanding constant vigilance and robust protective measures.
4. **Cost Variability:** Unforeseen costs may arise with web hosting, including maintenance expenses and potential upgrades, affecting budget predictability.

Source: 1) https://www.nomadsmd.com/free-web-hosting-disadvantages/
2) https://www.esds.co.in/kb/web-site-hosting-concept-types-advantages-and-disadvantages/

Tips to Remember

1. **Choose a Concise Domain:** Opt for a brief domain name, avoiding complex terminology for enhanced user recall.
2. **Simplicity is Key:** Select a name without difficult words to ensure accessibility and ease of understanding.
3. **Search Engine-Friendly:** Prioritize names that resonate well with search engines, enhancing online visibility.
4. **Consult a Web Designer:** Seek advice from a web designer for valuable insights and guidance in domain selection.
5. **Mindful File Publication:** Exercise caution when publishing files, ensuring a meticulous approach for a polished online presentation.

Source: 1) https://www.domain.com/blog/why-a-domain-name/
2) https://blog.hubspot.com/website/how-to-choose-domain-name

Integration of Padlet with Social Media

1. **Seamless Connection and Audience Expansion:**
    1. Padlet is connected effortlessly with social media platforms, allowing for the expansion of our audience.
2. **Efficient Business Promotion:**
    1. Products are promoted with precision through integrated social media channels as part of our business strategy.
3. **Versatile Padlet Export Options:**
    1. Content from Padlet can be exported in multiple formats for extensive distribution:
    2. Printing, PDF creation, Image capture, Excel export, and CSV saving.

Source: Ardini, S. N., & Marlinda, M. (2023). Enhancing Writing Report Texts Using Padlet Website: The Perceptions. Journal of Languages and Language Teaching, 11(4), 923-932.

Online Presentation Tool Overview

1. **Diverse Options:**
    1. Numerous online presentation tools are available for various needs.
2. **Examples:**
    - Notable tools include:
        - Google Slides
        - Sway
3. **Other examples:** Meetings, Documents, Products, Services

Source: https://visme.co/blog/best-presentation-tools/

ICT Tools for Video Sharing

Content: Innovative ICT tools facilitate video creation and sharing, enhancing engagement on presentations and websites.

These tools are used for Building reports, Audience engagement, Product promotion, Training provision, Market approach, Message conveyance

Examples:

- [Screencast-O-Matic]
- [Vimeo]

Source: Fast-Berglund, Å., & Blomb, E. (2020). Evaluating ICT-tools for knowledge sharing and assembly support. Advances in The Ergonomics in Manufacturing: Managing the Enterprise of the Future, 106.

Understanding Multimedia

Multimedia is an integration of multiple media elements: Text, Images, Animation, Sound, and Video.

Multimedia Benefits:

- Facilitates diverse, remote communication
- Creates visually impressive, accessible content
- Effectively attracts user attention

Example:

- E-Books: A practical application of multimedia

Source: 1) https://www.aplustopper.com/advantages-and-disadvantages-of-multimedia/
2) https://www.tutorialspoint.com/multimedia/multimedia_introduction.htm

Introduction to e-Books

What is an e-book?

- A digital book that can include text, images, multimedia objects, and more.

Uses of an e-Book:

- Promotion, archiving events, assignments, and company presentations

Source: 1) https://www.britannica.com/technology/e-book

2) https://en.wikipedia.org/wiki/Ebook

Building and Benefits of e-Books

Building an e-Book:

- Generated using software like MS PowerPoint.
- May include text, images, narration, and multimedia objects.

Benefits of e-Books:

- Raise company profile, create quality standards, scalable, accessible, and unique, and develop ICT skills.

Source: 1) https://www.microsoft.com/en-au/microsoft-365/business-insights-ideas/resources/10-easy-steps-to-making-your-own-ebook

2) https://thegeekpage.com/powerpoint-into-e-book/

Challenges and Publishing of e-Books

Challenges in e-Book Creation:

- Proprietary software, digital distribution, reliability of ICTs, compatibility issues, copyright concerns, safety, and data protection.

Publishing an e-book:

- Share via email, post on a website, convert to PDF, and advertise using social media.

Source: Montanari, M. (2023). Beyond e-books: investigating the digital transformation of the publishing industry.

Adult Learning

- **Definition**: Adult learning, also known as andragogy, is the process by which adults acquire knowledge, competence, and skills.
- **Characteristics**: Adult learners approach learning differently than children, being responsible for their success and capable of making informed decisions.
- **Continuing Education**: A broad term that includes everything from graduate degrees to personal development CDs, offering clear benefits, from career advancement to remaining fully engaged in life.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Optimal Conditions

- Adults learn best when:
- The importance of the knowledge or skill is understood.
- Freedom is given to learning in their own way.
- Learning is experiential.
- The time is right for them to learn.
- The process is positive and encouraging.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Virtual Classes

POSITIVES

Technically simple to implement.

Allows for direct, personal discussions.

NEGATIVES

Experience of passive learning if the group size is large.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Virtual Classes

Ideal for:

Small groups led by an experienced instructor.

Content best suited for discussion rather than practical application (though can be combined with other activities).

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Massive Open Online Courses (MOOC's)

POSITIVES

Easy-to-setup platforms exist.

Many MOOCs are available at low or no cost.

Content is largely pre-planned and pre-recorded, allowing for some interaction at minimal cost.

NEGATIVES

Can lead to fairly passive learning experiences.

Easy for learners to engage only minimally.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Massive Open Online Courses (MOOC's)

Ideal for:

Suitable for large audiences.

Applicable in cases where a useful MOOC already exists, eliminating the need for an organization/business to create new content.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Read/Watch/Test

POSITIVES

Technically simple and inexpensive to create and produce.

Read/Watch/Test approach provides a clear evaluation score (though not always useful).

NEGATIVES

Can lead to passive experiences.

Learning can be minimal and tends to cover facts more than thinking and analysis skills.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

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Read/Watch/Test

Ideal for:

Applicable in situations where quick and inexpensive content creation is needed.

Areas where compelling videos, often from experts, are available or can be easily produced.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Traditional e-learning activities and assessments such as matching, multiple choices, and drag-and-drop

POSITIVES

Technically simple and inexpensive to create and produce.

A format familiar to most learners based on their school experiences.

NEGATIVES

Suboptimal learning and assessment experiences.

Emphasis on facts and recognition over skills and reasoning.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Traditional e-learning activities and assessments such as matching, multiple choices, and drag-and-drop

Ideal for:

Applicable in situations where quick and inexpensive content creation is needed

Content that is unavoidably more fact-based, such as content for compliance purposes.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Social networks

POSITIVES

Available for employees whenever needed within their workflow.

Social networks can facilitate collaboration among employees at different levels and locations.

NEGATIVES

Discussions can lack focus.

Specific content or answers may be hard to locate.

Accuracy and perspective of posts are not vetted.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Social networks

Ideal for:

Often serves as an excellent supplement to other learning methods.

Source: Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Learn-by-doing simulations

POSITIVES

Can provide a powerful, engaging, and realistic experience.

Facilitates skill transfer to the job by offering experience in a safe environment.

NEGATIVES

Relatively costly to produce.

Requires a high level of skill for creation and scripting

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Learn-by-doing simulations

Ideal for:

Particularly effective for tasks with a defined procedure and simpler social skills.

An excellent method when training is needed, budget is sufficient, or a return-on-investment argument can be made.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

“Watch, Rate and Compare” activities

POSITIVES

Engaging and realistic.

Reinforces key performance criteria of a job role.

NEGATIVES

Less immersive than simulations.

Production is slightly more challenging than simple watch/read learning.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

“Watch, Rate and Compare” activities

Ideal for:

Social situations where learners can benefit from observing and emulating behavior.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Microlearning, workflow and “just-in-time” learning, and Performance support

POSITIVES

Integrates into an employee’s workflow without disrupting their job for learning.

Enhances efficiency and performance.

NEGATIVES

Certain job roles or content areas may require more depth than these models provide.

Designing these experiences can be a new endeavor for some.

Ensuring that target audience members remember the availability of these products can be challenging.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Microlearning, workflow and “just-in-time” learning, and Performance support

Ideal for:

While specifics depend on the situation, this category is worth considering in almost all circumstances.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Communities of practice

POSITIVES

Promote both long-term and short-term collaboration.

Encouraging the development of innovative and creative ideas

NEGATIVES

These initiatives can be time-consuming and mentally demanding.

Their implementation may pose challenges.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

Communities of practice

Ideal for:

An asset when equipped with the appropriate team.

Source: Guralnick, David. (2022). How Organizations Can Make the Most of Online Learning. Business Expert Press.

ICT and Innovation

Watch the following

https://www.youtube.com/watch?v=NZPcbOVLW2s
and explain the innovative way of distance learning

Operational Programme
Human Resources Development, Education and Lifelong Learning

Co-financed by Greece and the European Union

University of Ioannina

Department of Early Childhood Education

Thank you for your attention!