

I. People in multimedia

A. Audience

1. End-users
 - a) Business, Education
 - (1) Greater control on delivery
 - (2) More willingness to upgrade/maintain
 - (a) In-house support
 - (3) Component products
 - (4) Narrowly focused content
 - (5) Pre-existing formats, procedures, regulations
 - b) Consumer
 - (1) Value
 - (a) Price
 - (b) Long-term viability
 - (2) Packaged product
 - (3) Motivation (entertainment alternatives)
2. Intermediaries
 - a) Corporate clients
 - b) Developers
 - c) Publishers
 - (1) Affiliated label programs
 - d) Sales channels
 - e) Reviewers

B. Business, legal, marketing, sales

1. Scope market, define audience
2. Seek clients/publishers/backers
3. Budget, manage cash flow
 - a) High up-front costs, delayed payback
4. Handle copyright issues/negotiations
 - a) Secure permission to use others' material
 - b) Protect own intellectual property
5. Seek sales outlets
6. Pursue follow-up revenue sources

C. Executive Producer/Project Manager/Creative Director

1. Keep on top of evolving standards, alliances, opportunities
 - a) Avoid tying project too closely to one delivery platform
2. Schedule personnel, resources, outside services
3. Hire and retain key players
4. Track and protect media assets
5. Maintain consistent look-and-feel

D. System Administrator

1. Ascertain needs, specify hardware/software solutions
2. Schedule and supervise system maintenance
3. Supervise help desk/tech support
4. Supervise network security

E. Content expert and/or researcher

1. Authority on the subject matter
AND/OR
skilled in use of info sources
 2. Ability to communicate well with non-experts
- F. Information designer
1. Identify unique patterns in information presented
 2. Research multiple relevant views of contents
 3. Link separate content items effectively
 4. Often, mock-up product structure using authoring tools
- G. Interface designer
1. Find best cognitive mode for each information item (spoken voiceover, scrolling text, etc.)
 2. Define user controls and mode of interaction
 3. Often, establish visual and audio specifications for ease of use (color palettes, sound levels)
 4. Often, devise and implement online help system
 5. Often, mock-up product appearance using authoring tools
- H. Writers
1. Content description
 2. Script
 - a) Dialog / Voiceover
 - b) Action
 - c) User interaction
 - (1) Non-linear storytelling
 3. Copy editing
- I. Graphic designers and artists
1. Screen layout
 2. Illustrations
 3. Photographs
 4. Scanning, image processing, file conversion & compression
- J. Sound designers and musicians
1. Record original material (dialog, voiceover)
 2. Create/purchase sound effects
 3. Compose/commission music
 4. Mix/edit
 5. file conversion & compression
- K. Videographers and animators
1. 2D animation
 2. 3D animation
 - a) Modeling
 - b) Motion choreography and/or capture
 - c) Rendering
 3. Shoot original live action
 4. Mix/edit
 5. file conversion & compression
- L. Programmers
1. Assist other team members in use/scripting of authoring software
 2. Re-implement performance-sensitive parts of the product in a low-level language
 3. Create custom software tools

II. The process of multimedia

A. Concept and planning

1. Target audience/competitive analysis
2. Design for reuse
3. Content
 - a) Repurposed from existing sources
 - b) Original
4. Legal groundwork
5. Delivery platforms, media, technologies
 - a) Technical support implications

B. Design and prototype

1. "Dummy" content
2. Design goals
 - a) Review project from the user's viewpoint
3. Information design
4. Interface design
5. Storyboard
6. Mock-up prototype
7. Integrate "dummy" content into prototype
8. Test and fine-tune the prototype

C. Production

1. Schedules
2. Procedures
 - a) Storage allocation
 - b) File format specifications
 - c) File naming conventions
3. Media creation/repurposing/editing
4. Media quality assurance and tracking
5. Media integration and mastering
 - a) One-offs for testing
6. Documentation
7. Product packaging and collateral

D. Testing

1. Alpha-testing
 - a) Generally conducted in-house
2. Beta-testing
 - a) Representative sample of user population
3. Functional testing
4. Content testing

E. Mastering, duplication, and packaging

1. In-house
 - a) Short runs, electronic distribution
2. Outside service(s)
 - a) Collect all materials on media acceptable to mastering/printing/packaging plant
 - b) Track shipment/receipt of materials
 - c) Review/signoff on proofs

F. Distribution

1. Boxed product

a) Channels

- (1) Mail order
- (2) Distributors and Retailers
 - (a) Software
 - (b) Computer superstores
 - (c) Video
 - (d) Music
 - (e) Bookstores
 - (f) Specialty boutiques
- (3) Hardware bundles
- (4) Direct sales
 - (a) Government
 - (b) Education
- (5) Value-added Resellers (VARs)
- (6) Online outlets

b) Issues

- (1) Warehousing and shipping
- (2) Shelf space
- (3) Returns

2. Electronic transmission

a) Access

b) Bandwidth

c) Transaction support

(1) Payment

- (a) Credit card security
 - i) Keystroke capture
- (b) Digicash, Cybercash, etc.
 - i) not traceable
 - ii) micropayments

(2) Receipt verification

(3) Public key techniques

(a) Privacy

- i) Encrypt with recipient's public key. Only recipient can decrypt with own private key.

(b) Authenticity

- i) Encrypt with sender's private key. Only sender's public key can decrypt.

G. Follow-up

1. Product maintenance

- a) Bug fixes
- b) Track evolution of target platform

2. Customer service

- a) Technical support
- b) User feedback
- c) Registrations database

3. Additional opportunities

- a) Porting to additional platforms
- b) New versions/upgrades
- c) Repurposing
- d) Merchandising
- e) Resale of custom tools