

Multimedia

Occupational competency profiles

Updated edition – March 2001

TECHNO*Compétences*

Comité sectoriel de main-d'œuvre en
technologies de l'information et des
communications

The contents of this publication essentially originate from two studies coordinated by TECHNO *Compétences*:
Profils de compétences de professions stratégiques dans le domaine du multimédia, produced by PricewaterhouseCoopers and
Profils de professions reliées à la commercialisation dans l'industrie du logiciel et des produits multimédias, produced by GTL Formation.

The first of these studies was financed by TECHNO *Compétences* and the ministère de la Recherche, de la Science et de la Technologie, and the second by the ministère de la Culture et des Communications. Both studies can be found in their entirety on the TECHNO *Compétences* Web site: www.technocompetences.qc.ca

The entire text of this publication can be found at the following Internet address: www.technocompetences.qc.ca
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ISBN 2-922902-00-5
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TECHNO *Compétences* is financed by its partners in the industry and by Emploi-Québec.

The mission of TECHNOCompétences, the Comité sectoriel de main-d'oeuvre en technologies de l'information et des communications, is to promote and bolster human resources development in the new technologies sector. Hence, this document accurately reflects our mandate in the sense that it constitutes a valuable human resources management tool in the multimedia industry.

Its publication would not have been possible without the support of the ministère de la Culture et des Communications, Collège Ahuntsic and the Institut des communications graphiques. We would also like to emphasize the indispensable assistance of PricewaterhouseCoopers in drafting the section entitled "User Guide for Competency Profiles".

We would also like to acknowledge the constructive contribution many of our partners made to the studies on which this publication is based, specifically: Profils de compétences de professions stratégiques dans le domaine du multimedia (Competency profiles for strategic occupations in

the multimedia industry) and Profils de professions reliées à la commercialisation dans l'industrie du logiciel et des produits multimédias (Occupational profiles related to marketing in the software and multimedia products industry). These were financed respectively by the ministère de la Recherche, de la Science et de la Technologie and by the ministère de la Culture et des Communications. We would like to thank both for their support. PricewaterhouseCoopers and GTL Formation contributed greatly appreciated expertise and attention to our efforts.

We would also like to underscore the wonderful cooperation of all the members of the working committees and multimedia associations listed in the Appendix.

Last but not least, we would like to thank the one hundred or so members of the multimedia industry whom we consulted in their roles as experts and professionals working in specific strategic occupations. Without their participation, our profiles would not have reflected reality, and would have proven fruitless in the day-to-day management of our companies.

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1.

Introduction and context

PROBLEMS ENCOUNTERED IN HUMAN RESOURCES MANAGEMENT IN THE MULTIMEDIA INDUSTRY

The Québec multimedia industry is experiencing a surge in growth, which poses a challenge with regard to the development of human resources and skills that will allow companies to satisfy those challenges associated with marketing and globalization. The processes put in place to recruit, develop and sustain a creative and highly qualified workforce from a technical perspective must be adapted to address the following key problems:

- Access to an adequate labour pool that satisfies industry requirements.
- The acquisition or development of specific competencies.
- The implementation of working conditions apt to foster the development and retention of workers.

It is difficult to provide a definition that reflects a consensus about the industry and the term "multimedia". The industry in this sector is highly diversified and constantly evolving. It is a young industry founded on innovation, networking and interdependence. Its fast evolution and position at the crossroads of several activity sectors make it very difficult to define. For the purposes of this study, we only retained the production and integration aspects of the contents.

A SOLUTION TO THE MISUNDERSTANDING OF THE MULTIMEDIA OCCUPATIONS: COMPETENCY PROFILES

One of the problems related to the development of the workforce in the multimedia sector is the misunderstanding of the occupations and competencies that will enable this industry to forge ahead. Cognizant of the importance such a definition of occupations could have on formulating industry training, orientation and promotion requirements, TECHNOCompétences launched an identification process for these occupations and competencies. Two working committees made up of representatives of companies, of the Association des producteurs en multimédia du Québec (APMQ), of the Centre de promotion du logiciel québécois (CPLQ), of the Consortium multimédia CESAM and of the Forum des informaticiens et du multimédia (FIM) were created. (The composition of these committees can be found in the Appendix.) They spearheaded the production of two studies focusing on eleven strategic occupations in the multimedia industry: *Profils de compétences de professions stratégiques dans le domaine du multimedia* (Competency profiles for strategic occupations in the multimedia industry) and *Profils de professions reliées à la commercialisation dans l'industrie du logiciel et des produits multimédias* (Occupational profiles related to marketing in the software and multimedia products industry). PricewaterhouseCoopers management consulting firm (9 profiles) and GTL Formation (2 profiles) produced the profiles.

These studies were produced in close collaboration with members of the multimedia industry. More than one hundred members were consulted in their roles as experts or professionals in specific strategic occupations. The producer profile was

developed in conjunction with the Association des producteurs en multimédia du Québec (APMQ) following the same methodology.

Both studies can be found in their entirety on the TECHNOCompétences Web site:
www.technocompetences.qc.ca
(under the Studies heading)

This publication, which represents an international first with regard to defining multimedia occupations, represents the fruit of the two studies mentioned earlier. We hope the work accomplished will greatly benefit the multimedia sector, and it is for this reason that we integrated information on methods for using the profiles,

which is presented in the next section.

Owing to the fact that the contents of this document originates from two different studies, there is no perfect homogeneity in the presentation of the marketing director and sales director profiles produced by GTL Formation and the nine others produced by PricewaterhouseCoopers. We allowed these differences to appear out of respect for the approaches used by each company.

SELECTION CRITERIA FOR OCCUPATIONS

In the same manner as the arts, culture and communications industries, the multimedia industry comprises a large number of occupations. The absence of a clear definition of the multimedia industry has resulted in many occupations being associated with it in numerous publications and studies. In many cases, these occupations encompass several that are normally associated with other activity sectors, such as computer manager, photographer and video artist.

Our approach entailed focusing on occupations carried out within the specific context of the multimedia industry. We did however make an exception for the marketing director and sales director profiles, since these occupations have a strategic importance in the marketing of multimedia products. Moreover, the rapid growth of the industry in recent years, and the fact that it is still in a stage of development, cannot help but influence the nature and evolution of the occupations it encompasses. This determines a framework of references in which it is difficult to clearly identify the structure of organizations and the key roles and duties in the industry. To overcome this difficulty, we established a number of criteria for selecting the eleven strategic occupations whose profiles are outlined in Section III:

- Occupations that are at the crossroads of creation and technology.
- Occupations for which the nature of the professional competencies are specific to the multimedia industry.
- Occupations that have a significant impact on the industry.
- Occupations whose basic nature is recognized by industry members.

II.

User Guide of Competency Profiles

GUIDE FOR FACILITATING COMPETENCY MANAGEMENT IN YOUR COMPANY

Competency management constitutes a constant preoccupation for human resources management experts and managers in the multimedia industry. The competencies and attributes allowing employees to fulfill their roles and responsibilities is one of the main factors underlying the competitiveness of a company. It is for this reason that several companies are of the opinion that today it is necessary to clearly define the key competencies their employees must have in order to foster continuous development and update.

The competency profile is the preferred management tool for this approach.

To facilitate the use of the competency profiles we have established for eleven strategic occupations in the Québec multimedia industry, we have devised this guide. It outlines the steps to follow to adapt these competency profiles to the specific needs of your company. It also presents a few tips for using the competency profiles within the framework of your recruitment and selection processes, work performance management, training and remuneration activities.

COMPETENCY PROFILES ARE AN ESSENTIAL HUMAN RESOURCES MANAGEMENT TOOL

Competency profiles now constitute a cornerstone for all corporate human resources management activities.

They form a framework of strategic references that ensure cohesion between all these activities. They also represent an effective management tool with regard to internal communication and personnel supervision, in addition to being essential to the development and implementation of all training strategies.

Several competency profile models exist, and they generally comprise three sections:

- A brief presentation of the occupation
- A description of the key roles assumed in the execution of a specific position in the company. It includes all the tasks of position incumbents and is representative of all companies, yet specific to none. For some profiles, these tasks are classified under two categories: beginner and experienced, as is the case here for the computer graphic artist, 2D and 3D animator, and integrator profiles. The beginner level includes the tasks attributed to employees who have very little experience, specifically 18 months or less. The experienced level comprises the tasks of more experienced workers, specifically those with more than 18 months of experience.
- A competency profile that comprises the knowledge, know-how, skills and personal qualities that affect work performance.

The competency profiles are classified under two categories: professional competencies and behavioural competencies.

The professional competencies that are related to mastering knowledge or know-how acquired by means of diverse work experiences required for the execution of tasks, comprise three aspects, specifically: technical, content and management (when applicable). The number of relevant competencies has not been limited, since our objective was to cover all the professional competencies necessary for the execution of tasks and responsibilities in all companies working in the industry.

Behavioural competencies define abilities, personality characteristics and traits that will enable the employee to satisfy the requirements and conditions for fulfilling these roles and responsibilities, as well as the corporate culture and values. The number of these competencies has been limited to one dozen for each occupation, in order to emphasize those that are more significant.¹

The professional and behavioural competencies are presented in order of importance in accordance with the comments collected by members of the industry.² From one organization to the next, the order may be modified in order to better reflect the specific needs of a company.

¹ With the exception of the marketing director and sales director profiles, which use a different approach because they were developed by another firm.
² Ibid.

The lists of roles and responsibilities, and of competencies are complete. They present a general portrait of the occupations concerned. In some companies, for example, certain roles were addressed while in others, these same ones are less prevalent or non-existent. Here, we wanted to present a broader vision of the occupations in order to include all aspects.

There are different levels of competency profiles:

- There are generic competency profiles that apply industry-wide. These profiles comprise an extensive portfolio of both generic and specific competencies found in different companies.
- There are competency profiles adapted to specific positions found in a few specific companies.
- Lastly, there are specific competency profiles that reflect the individual needs of a company or person.

The competency profiles that accompany this User Guide are generic competency profiles devised based on comments gathered from industry members. Therefore, they comprise competencies that are applicable in several industries, as well as those that reflect situations specific to certain companies.


To maximize their usefulness, these must be adapted in accordance with your business strategy, the size of your company, your work organization method, the versatility or specialization of your workstations, and your organizational culture.

HOW TO ADAPT A GENERIC COMPETENCY PROFILE TO THE CONTEXT OF YOUR COMPANY

Adapting a generic competency profile is a relatively simple task. Nonetheless, it cannot be carried out in a vacuum, and therefore requires the input of managers, supervisors and position incumbents.

We recommend that you follow the steps below to adapt these competency profiles to your needs:

1- Identify the positions in your company that are similar to what is presented in one or more of the eleven generic profiles. To do so, you must review the section on tasks presented at the beginning of each generic profile. The title associated with the role (for example, designer-script developer) would certainly bring to mind the types of tasks associated with a position, but may also create

 some confusion.
In an industry like multimedia that is new and constantly evolving, we have ascertained that the position titles used from one company to the next may be very different.


2- Compare the tasks in the generic profile to your in-house job description. If you have already prepared job descriptions, you may compare the tasks presented in the generic profile to those included in your job description.

Ascertain with those concerned if your job descriptions are up to date, and clearly reflect the work organization method you would like to implement or maintain in the company. In fact, managers frequently fail to update position descriptions, even when the work contents and tasks associated with this position change.

3- Verify the contents of the tasks for the position in question. If you do not have any job descriptions, ask the person supervising the type of position you are interested in, or a few position incumbents to verify the contents of the tasks associated with the position. It is possible that in your organization, positions are more or less specialized than what is described in the eleven generic competency profiles.

4- Identify the professional and behavioural competencies relevant to the execution of each task you have associated with a position. You

must enlist the cooperation of a supervisor or a few position incumbents in order to verify the list of competencies you have established for this position. The competencies you retain must be those necessary to execute the tasks in a satisfactory manner.


Note that workers may have a profile that includes competencies other than those required by their positions. In fact, depending on their respective experience, training and personal characteristics, employees may add other competencies to their individual profiles.

It is very important that you ensure that the tasks related to a position are adapted to the realities of your organization.

HOW TO USE COMPETENCY PROFILES FOR HUMAN RESOURCES MANAGEMENT ACTIVITIES

Once you have finished adapting your competency profiles, you will be in a position to use them for your different human resources management activities. Here, we provide a few tips for their use during your recruitment and selection, work performance management, training and remuneration activities.

1. Recruitment

During a recruitment process involving several applications to fill positions you are offering, the competency profiles may be useful for:

- a) Evaluating your needs in accordance with your work organization method before proceeding with recruitment activities
 - b) Preparing a job offer
 - c) Selecting a distribution medium for your job offer
-
- a) Evaluating your needs according to your work organization method

You may want to hire a new employee to alleviate a work surplus or a situation where you feel that you are lacking qualified resources. How could these competency profiles help you? By taking into consideration the description of the tasks listed at the beginning of the profiles, you will be in a position first of all to assess if the tasks are properly distributed and

if your operating structure is logical and efficient. The redistribution of work and the re-evaluation of work team operations may present interesting options. If you come to the conclusion that your only solution is to recruit from outside the company, the development or revision of the competency profile for the designated position will allow you to be very specific with regard to your needs.

b) Preparing a job offer

When preparing a job offer, it is essential to be specific with regard to a sought profile. By preparing a job offer in which the tasks, responsibilities and expectations are clearly established, job seekers will be in a position to better evaluate their interest and to determine if they correspond to the sought profile. You may receive fewer applications, although candidates that do respond will better satisfy your requirements. The competency profile will therefore be useful in clearly outlining your requirements in accordance with the sought competencies. You may insist in your job offer not on the competencies themselves, but on the work training and experience profile that in your opinion will have enabled the candidates to acquire the competencies you are seeking. Hence, for example, if your competency profile for an animator comprises expertise with certain technological tools, and you are aware that this competency can only be acquired by means of formal training, you need only demand that a candidate have a diploma or certificate from an academic institution recognized in the animation industry.

c) Selecting a distribution medium for your job offer

By referring to the competency profiles and training requirements as well as the level of experience required, you will be in a position to select the distribution medium that will be most appropriate for reaching your target candidates. For example, if you are looking for animators with a diploma or certificate, placement services at academic institutions could prove to be interesting venues. However, if you are seeking candidates who are more experienced, your network of contacts or that of your employees might be more appropriate. It goes without saying that criteria such as cost, frequency of publication or the urgency of the need should also be considered in the selection of the distribution media for a job offer.

2. The selection

During the selection process used to identify the individual you want to hire from among all the candidates who apply for the vacant position, the competency profiles could be useful for:

- a) Selecting evaluation methods
- b) Developing evaluation tools
- a) Selecting evaluation methods

The selection of evaluation methods for candidates must be carried out largely based on the competencies you want to evaluate. In fact some methods are more effective than others for evaluating certain competencies.

For example, to evaluate an individual's expertise in written communication, administering a written test or asking for examples of written production may be more appropriate than simply holding an interview.

The same is true for competencies related to the use of specific technological tools. Or, to evaluate candidates' abilities to work on a team or to resolve conflicts, an excellent approach would be to create realistic situations within the framework of an interview.

b) Developing evaluation tools

The development of an interview guide, or the selection and preparation of specific tests could be determined by means of the competency profile for the vacant position.

The tasks listed in the competency profile will make it possible to assess the level of expertise regarding the competencies being evaluated among candidates. Properly putting in context the type of work to be carried out in your company is a basic rule of thumb that should be respected in the development of an evaluation tool. Hence, the concept used to evaluate to what extent candidates can demonstrate their ability to establish sound interpersonal relationships will be different for a project manager position than for a content analyst.

For a project manager, the context may relate more to a supervision relationship, while for a content analyst, it would be inspired by the dynamic of the interaction that exists on a project team.

3. Work performance management

Within the framework of the performance management process, competency profiles may be useful for:

- a) Clarifying the employee's role in the company and agreeing on expectations and objectives
- b) Later, comparing the employee's performance at work with regard to the expectations and objectives established previously

a) Clarifying the employee's role in the company and agreeing on expectations and objectives

The revision of the competency profile by the employer and the employee makes it possible to develop a shared understanding of the requirements, the contents and the scope of the tasks associated with a position. A different interpretation from these often leads to misunderstandings, dissatisfaction, and losses in productivity. The competency profile is also useful for establishing expectations and objectives for the position in question, since it provides a reference framework allowing these expectations to be brought in line with the real level of expertise of the competencies the employee must have.

b) Comparing the employee's performance at work with the expectations and objectives established previously

The competency profile may constitute the reference point on which we can base the comparison between the performance level of the employee's work, and the company's expectations. By using this comparison, it will be easy to pinpoint the employee's strengths and shortcomings. The competency profile provides an objective basis for discussion that will prove useful for focusing on exchanges concerning corporate requirements.

4. Training

With regard to training and development activities, the competency profiles may prove useful for identifying training and development needs.

The competency profile contains information that is essential for determining the training needs that must be addressed. To do so, it is necessary to establish the employee's level of expertise for each competency required to execute the tasks related to the position.

This level of expertise can be assessed by means of observations in the workplace and interviews with the employee and his or her supervisor. It is important to base the evaluation on the key competencies listed in the profile. Once this evaluation has been completed, it is possible to specify, in order of priority, the key competencies that should be addressed in a development plan.

5. Remuneration

When devising the salary policy for your company or recruiting new employees, the competency profiles may prove useful for establishing points of comparison with the industry, or for rating your different positions on your salary scale. The main challenge that emerges when attempting to establish the relative salary value for a position on the labour market is to ensure that we properly compare those positions that involve the same tasks and competency level.

In this regard, the job titles used in the multimedia industry can be misleading. The tasks carried out by a designer-script developer at a company might be executed by a project manager at another company.

For this reason, it is essential to first obtain more detailed information as is outlined in the competency profile, to then be in a position to collect the appropriate salary information.

The company's internal salary scale may also be based on the competency profiles. Using the list of roles and responsibilities and the associated key competencies, you will be able to determine a salary weighting specific to each of your employee positions in accordance with your business strategies, your products and services, and your work organization method. Therefore, your competency profiles will make it possible for you to relate the relative market value of these positions in accordance with the internal salary equity parameters you want to respect.

Therefore, you must regularly revise the contents of your competency profiles in order to avoid recruiting, training and evaluating your employees based on competencies that are no longer relevant for your company.

Conclusion

Do not forget to continuously update your competency profiles. The lifespan of a competency profile is very variable. In a field that is as dynamic and unpredictable as multimedia, the specific tasks and competencies relating to jobs continue to evolve. Therefore, it is necessary to continually update your competency profiles. The scope of the changes you will have to make will certainly vary. In some cases, only the reference to certain tools and technologies will have to be changed.

In other cases, it will be necessary to revise all the competencies required to take into consideration changes in the way the work is accomplished.

III.
Competency profiles for
11 multimedia occupations

1.	Producer	18
2.	Project Manager	20
3.	Designer-Script Developer	22
4.	Content Analyst	24
5.	Artistic Director	26
6.	Computer Graphics Designer (beginner and experienced levels)	28
7.	2D and 3D Animator (beginner and experienced levels)	30
8.	Integrator (beginner and experienced levels)	32
9.	Web Designer	34
10.	Marketing Director	36
11.	Sales director	39

1. PRODUCER

Presentation

The producer assumes responsibility for the multimedia project, from the first step to the last, usually marketing. This individual ensures the orchestration of the different activities and maintains the link between the client and the production team. We have noted that a considerable percentage of companies in the multimedia industry employ representatives entrusted with promotion and sales activities, which has the effect of altering the roles of producers. At other companies, producers assume several roles, including those of president or vice-president, combined with the role of producer. Here, we are only considering the role of the producer.

At in the audiovisual industry, we identified three types of multimedia producers, specifically executive producers, assistant producers and producers. In this profile, we are referring not to the role of producer played by certain companies, but rather, to that held by an individual.

Since the producer plays a senior role in the company, we decided not to draw a distinction between beginner and experienced levels.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Participating in the development of the corporate business strategy • Ensuring the company’s business development • Managing relations with partners or internal and external clients • Devising preliminary multimedia concepts, possibly based on the specifications of partners or internal and external clients • Carrying out or delegating the budgetary evaluation of projects • Formulating or delegating the formulating of financial scenarios • Preparing, or overseeing the preparation of proposals to partners and external clients • Participating in the negotiation of user rights for existing and original contents • Participating in the negotiation of service contracts for the creation of original content • Participating in the negotiation and signing of agreements with partners or clients • Forming the production team • Ensuring a project’s monitoring and production (budget, deadlines, human and technical resources) • Adapting the project to market realities so as to ensure that the product satisfies a need • Inspecting or delegating the inspection of the quality of the finished product • Working with the marketing team • Conducting a production evaluation • Ensuring technological and competitive intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to demonstrate autonomy when updating technology-based knowledge • Knowledge of each production step • Basic knowledge of programming languages, creation software, databases, computer components, their capabilities and their technical limitations • Knowledge of Internet technologies and other multimedia supports, their possibilities and their limitations <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to channel the creativity of team members • Understanding of the creation process • Possesses broad general culture (e.g.: artistic, scientific, social, etc.) • applicable to the activity spheres of clients or corporate partners • Knowledge of the legal framework applicable to contract negotiation • Knowledge of the legal framework applicable to private life and/or intellectual property • Ability to foresee international cultural trends and society phenomena • Knowledge of communication channels • Updated knowledge of the competition and available products • Ability to conduct a quality inspection <p><i>Management aspect</i></p> <ul style="list-style-type: none"> • Ability to make decisions • Ability to delegate • Ability to negotiate • Ability to define the framework for the deliverable and to evaluate its feasibility • Ability to manage the financial aspects of the project and to respect the established budget • Ability to manage main activities (marketing, administration, production) related to a project’s implementation and production • Ability to identify and put in place conditions conducive to respecting deadlines • Ability to represent one’s organization • Knowledge of marketing and distribution principles • Ability to prepare business plans 	<ul style="list-style-type: none"> • Autonomy • Verbal and written communication • Conceptualization/ability to analyze and synthesize • Creativity • Initiative • Leadership • Sound interpersonal relations • Team spirit • Resistance to stress • Global vision • Thoroughness • Entrepreneurship

2. PROJECT MANAGER

Presentation

The project manager coordinates and controls all aspects related to the planning and development of multimedia projects. The title “project director or executive” also seems to be used to designate the same type of role.

At the outset, it would appear important to us to distinguish the role of project manager from that of producer. The project manager is more focused on the project’s production and on the management of the project team. While this individual is responsible for establishing a working relationship with the client, this will not normally be done until the producer launches the project. Depending on the size of the different projects, the manager may be more or less involved in the production process for the product.

The producer is more involved before the start of production. It goes without saying that the project manager and the producer must ensure the effective circulation of information regarding the client’s expectations. The sound management of the work team and of the project itself is essential in the production of a multimedia product. Teamwork constitutes a fundamental element in this industry. Effective coordination between the different stakeholders is critical. Because this occupation falls clearly under the management category, we have decided not to separate the beginner and experienced levels.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Participating in the definition of the client's preferences and requirements, and in the analysis of his needs • Participating in the evaluation of the project's feasibility • Participating in the conception and drafting of product specifications or the offer of services • Preparing a structured description of the project needs • Managing technological resources by identifying needs and selecting software and computer components (hardware) • Coordinating and participating in pre-production activities including the script, product parameters, cost estimate, and preparation of budgets and schedules • Ensuring relations between the client and the project team during the execution • Managing the project's human and financial resources • Preparing progress reports and approvals for the client • Documenting the project's evolution in writing • Preparing and making presentations to the clients by using technical and visual tools with a view to presenting the progress of the project • Supporting the immediate supervisor in different activities such as marketing, finance, bids, contract negotiations, purchase of materials, etc. • Maintaining communication between the different team members, and ensuring that the members communicate with each other • Participating in the preparation and negotiation of contracts with external suppliers • Reviewing the quality of deliverables provided by external suppliers • Ensuring that legal aspects are overseen • Following up with the client after delivery of the product • Ensuring technological and competitive intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to assess, analyze and resolve operational problems • Knowledge of multimedia technologies, their possibilities and their limitations • Knowledge of each production step • Knowledge of multimedia creation tools in technical environments (PC or Mac) • Knowledge of programming languages, databases, their capabilities and limitations • Ability to oversee quality control • Ability to quickly learn and adapt to new computer tools • Ability to demonstrate autonomy when updating technology-based knowledge • Ability to oversee the set-up of a computerized presentation (desktop presentation) • Ability to operate change control mechanisms <p><i>Contents aspect</i></p> <ul style="list-style-type: none"> • Ability to adapt the product to user needs and habits • Ability to understand the creative process • Ability to structure and synthesize the information to be conveyed • Knowledge of the legal framework applicable to contract negotiations • Knowledge of the legal framework applicable to private life and copyrights <p><i>Management aspect</i></p> <ul style="list-style-type: none"> • Ability to apply decision-making techniques • Ability to assess a project's feasibility • Ability to channel the creativity of team members • Ability to manage the budget • Ability to manage human resources within a production environment • Ability to manage a project and a work plan • Ability to continuously update the project's evolution • Ability to negotiate • Ability to represent one's organization • Knowledge of the primary management and project planning tools 	<ul style="list-style-type: none"> • Leadership • Team spirit • Customer-service orientation • Ability to analyze, synthesize and conceptualize • Interpersonal relations • Verbal and written communication • Flexibility • Initiative • Methodical approach • Resistance to stress • Openness to criticism • Practical mind

3. DESIGNER-SCRIPT DEVELOPER

Presentation

By applying creative, research and analysis skills, the designer-script developer must be in a position to identify the possibilities offered by multimedia in order to recommend new approaches and original concepts in the areas of communications and/or electronic entertainment. This role comprises two complementary aspects, specifically design, which consists essentially of a creation step, and script development, which presents a technical component.

The tasks associated with the role of designer-script developer are essential at companies in the multimedia industry. In the larger companies, a single individual can fulfill the role of designer-script developer.

We have also noted, however, that in smaller companies, this role is often fragmented or associated with one or more other roles. The designer-script developer is particularly active at the outset of the process, and the role loses some of its importance as the different production steps are completed.

The designer-script developer occupation can be classified under the category of roles that are held by experienced individuals. We decided not to separate the beginner and experienced levels.

DESIGNER-SCRIPT DEVELOPER

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Participating in the analysis of client needs • Defining and developing the initial concept for the product or service • Adapting the concept and media according to the client's comments • Planning interactivity and the navigation and user-interface diagrams • Participating in drafting specifications • With the project manager, devising the documentation for the different stakeholders • Determining the type of contents, and developing the production script • Overseeing the production of a model that is representative of the concept • Participating in the content structuring • Participating in the design of the interface • Participating in the product's production and validation 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to research content on different media • Knowledge of multimedia technologies, their possibilities and limitations • Ability to optimize the media in relation to delivery • Ability to demonstrate autonomy with regard to updating technology-based knowledge <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to transpose written and visual content and interactive sound • In-depth knowledge of writing techniques and interactive script development • Ability to structure and synthesize the information to be conveyed • Ability to organize information logically • Ability to adapt the product to user needs and habits • Ability to envision interactive situations that capture the attention of users • Understanding of the creation process • Ability to organize one's work and to manage files and folders • Artistic background • Knowledge of the legal framework applicable to private life and copyrights 	<ul style="list-style-type: none"> • Ability to conceptualize and draw abstracts • Creativity • Team spirit • Methodical approach • Customer service orientation • Interpersonal relationships • Verbal and written communication • Attention to detail • Ability to respect deadlines • Perseverance • Openness to criticism • Flexibility • Resistance to stress

4. CONTENT ANALYST

Presentation

The content analyst structures, organizes and manages electronic data in such a manner as to ensure that the information is clear, high-quality, coherent and accessible in order to respond to user requirements. This individual is concerned first and foremost with logic and with the information structure. This role is different from that of the writer who, as the title implies, drafts the contents of multimedia products.

We have noted that many companies distribute the tasks associated with this position among several individuals. Most often, the designer-script developer also assumes the role of content analyst. If the same individual does not hold both these positions, it is important for the designer-script developer and the content analyst to work in close collaboration.

In some companies that are more structured, or in companies involved in the production of multimedia products containing a great deal of information, or that offer a high level of interactivity, we have identified individuals working in a position in which the primary responsibility is content analysis.

In spite of the fact that this role is less prevalent in the Québec multimedia industry, we decided to include it in our list of profiles. According to the internal experts at PricewaterhouseCoopers s.r.l, companies that ensure adequate production content analysis succeed in marketing a superior quality product.

The occupation of content analyst can be classified under the category of roles assumed by experienced individuals. Therefore, we decided not to separate the beginner and experienced levels.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> Structuring information to prioritize and segment it in a logical manner in cooperation with the designer-script developer Defining databases in response to the product's objectives Researching available documentary resources Using tools that define content with a high level of interactivity Inspecting the quality, integrity and coherence of the information at the different stages in the product's development on the medium in which it will be delivered Overseeing the circulation of information and files within the project team Following up with the client to obtain the additional information required for the project Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> Knowledge of multimedia technologies, their possibilities and limitations Knowledge of publishing software and of technological innovations and their integration in the production process Ability to quickly learn and adapt to new computer tools Ability to demonstrate autonomy when updating technology-based knowledge Ability to operate change control mechanisms <p><i>Content aspect</i></p> <ul style="list-style-type: none"> Ability to logically structure and synthesize the information to be conveyed Ability to research documentation and images Knowledge of databases, their capabilities and their limitations Ability to adapt the product to user needs and habits Ability to organize one's work, and to manage files and folders Knowledge of every production step Knowledge of the legal framework applicable to private life and copyrights <p><i>Management aspect</i></p> <ul style="list-style-type: none"> Ability to continuously update the project's evolution Ability to ensure quality control Ability to represent one's organization 	<ul style="list-style-type: none"> Ability to analyze, synthesize and conceptualize Methodical approach Attention to detail Customer service orientation Team spirit Verbal and written communication Openness to criticism Interpersonal relationships Perseverance Ability to set and respect deadlines Flexibility Autonomy Practical mind

5. ARTISTIC DIRECTOR

Presentation

The artistic director combines artistic and technical competencies to determine how multimedia can generate new solutions in the areas of business, recreation, education and communications. This individual is responsible for the artistic aspects of the product's design to its production.

Most firms working in the area of multimedia have an artistic director. The company size will influence the importance given to the coordination/ management of the production team. In fact, at smaller firms, the artistic director is most often involved in the product's production, while in larger companies, most of this individual's time is spent on the creation of the visual concept and the monitoring of the computer graphics artists and animators.

Artistic directors often have basic training in the field of arts, with additional training in the technical field. Expertise in the artistic aspects and in technical know-how are essential in the execution of their duties. Incidentally, in several organizations, the artistic director will have previously held the position of computer graphics artist. Given the fact that the artistic director can be classified under the management category, we decided not to separate the beginner and experienced levels.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Meeting the client to present the concepts and aspects related to creation • Participating in the script development • Defining preferences and requirements with the client with regard to the visual aspect, and conducting the product analysis • Defining the platform and the visual identity • Coordinating the artistic work of the computer graphics artists, illustrators, animators, sound producers, photographers, multimedia designers, etc. • Designing the graphic communication and ensuring its continuity • Verifying that graphic standards are respected • Inspecting the product quality • Ensuring communication between the stakeholders involved • Approving and/or researching images • Managing human resources • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Knowledge of Internet and multimedia technologies, their possibilities and limitations • Knowledge of multimedia creation tools in technical environments (PC or Mac) • Ability to evaluate, analyze and resolve operational problems • Ability to establish and produce the interactive concept • Ability to adapt the interactivity of pages • Knowledge of each production step • Ability to quickly learn and adapt to new computer tools • Ability to demonstrate autonomy when updating technology-based knowledge • Ability to create on-screen illustrations • Ability to process fixed and animated images • Ability to optimize media in accordance with delivery • Ability to operate change control mechanisms <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Understanding of the creation process • Ability to adapt one's product to user needs and habits • Knowledge of publishing software and of technological innovations and their integration in the production process • Artistic culture • Ability to evaluate the feasibility of the design segment of the project • Ability to organize one's work and to manage files and folders • Ability to transpose written content into visual content and interactive sound • Ability to prepare the mock-up • Ability to create the interface design • Ability to produce graphic design • Ability to create graphic designs • Ability to compose the visual aspect • Ability to conduct research of documentation and images • Ability to ascertain the difference between shapes, volumes and details • Ability to visualize and envision geometric shapes and objects in space • Knowledge of the legal framework applicable to private life and copyrights <p><i>Management aspect</i></p> <ul style="list-style-type: none"> • Ability to manage part of a project • Ability to manage human resources in a production context • Ability to manage the budget • Ability to channel the creativity of team members • Ability to apply decision-making techniques 	<ul style="list-style-type: none"> • Leadership • Creativity • Artistic sense • Ability to analyse, synthesize, and conceptualize • Customer service orientation • Team spirit • Interpersonal relationships • Verbal and written communication • Initiative • Flexibility • Openness to criticism • Methodical approach • Resistance to stress

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- Ability to conduct quality control of the artistic aspect

6. COMPUTER GRAPHICS ARTIST

Presentation

Computer graphics artists combine technical skills and artistic abilities to design multimedia content. This role involves the production and/or interpretation of graphic, sound or visual elements based on a product's specifications. At multimedia companies, computer graphics artists play an essential role with integrators and producers.

In small organizations, they assume the responsibilities associated with the artistic aspects of the project, including animation. In larger organizations, an artistic director normally outlines their work, as well as that of the animators.

Computer graphics artists who specialize in multimedia fall under two categories, specifically computer graphics artists and technical computer graphics artists. The strengths, limitations and interests of these two types of computer graphics artists are more or less complementary. It is important in the selection process to clearly identify the needs of the organization so as to select the appropriate type of computer graphics artist. Despite their differences, computer graphics artists must all be in a position to use the technical tools commonly employed in computer graphic art.

The computer graphics artist may be an entry-level position in a company. We have therefore separated the tasks of computer graphics artists according to whether they are at the beginner or experienced level. The introductory level involves tasks normally assigned to an individual during his or her first year and a half on the job. The experienced level comprises the tasks carried out by an individual who has mastered his or her role in a company. This is generally someone who has at least eighteen months of experience. The competencies at both levels of experience are classified under the headings "professional competencies" and "behavioural competencies".

Tasks	Professional competencies	Behavioural competencies
<p><i>Beginner</i></p> <ul style="list-style-type: none"> • Understanding the technical prerequisites of the script • Understanding the specifications of the graphic interface • Designing and producing images, graphics and tables • Creating the visual content including the text positioning and the formatting • Ensuring the visual and ergonomic coherence of productions • Staying abreast of new computer graphics tools <p><i>Experienced</i></p> <ul style="list-style-type: none"> • Evaluating and understanding the technical prerequisites of the scenario • Understanding the specifications of the interactive screen development • Designing and producing images, graphics and tables • Creating the visual content including text positioning and formatting • Participating, with the other members of the team, in the development of the graphic interface and the visual content • Ensuring the visual and ergonomic coherence of productions • Handling video, photography and sound files • Proposing new computer graphic approaches/production methods • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to produce illustrations on the screen • Ability to process fixed and animated images • Knowledge of Internet and multimedia technologies, their possibilities and limitations • Knowledge of multimedia creation tools in technical environments (PC or Mac) • Ability to optimize the media based on delivery • Ability to evaluate, analyze and resolve operational problems • Ability to quickly learn and adapt to new computer tools • Ability to demonstrate autonomy when updating technology-based knowledge • Ability to assemble a computerized presentation (desktop presentation) • Ability to digitize sources • Ability to produce sound effects and video documents <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Graphic design skills • Ability to compose the visual aspect • Ability to organize one's work, and to manage files and folders • Ability to adapt one's product to user needs and habits • Ability to transpose written content into visual content and interactive sound • Ability to conduct documentary and image research • Ability to distinguish between shapes, volumes and details • Ability to visualize and envision geometric shapes and objects in space • Artistic background 	<ul style="list-style-type: none"> • Artistic sense • Attention to detail • Creativity • Ability to analyze, synthesize and conceptualize • Ability to respond to a specific request • Team spirit • Methodical approach • Openness to criticism • Perseverance • Autonomy • Flexibility

7. 2D AND 3D ANIMATOR

Presentation

The positions of 2D and 3D animators require that their incumbents have both artistic skills and knowledge of animation tools/software to produce digital animation. Animators often work for companies that produce games, edutainment CD-ROMs and special effects.

Despite the fact that animation is a field that comprises a large number of sub-specialities and that the creation of 3D animation requires expertise in software that is different from that used for 2D animation, we nonetheless classified 2D and 3D animation in the same profile. This can essentially be explained by the nature of the tasks assigned to 2D and 3D animators, specifically tasks that are apt to vary according to the size of the organizations for which they work. Therefore, large organizations tend to foster the specialization of their animators. For example, these organizations constitute teams entrusted exclusively with the modeling, application of textures, lighting, preparation of special effects, etc. In smaller companies, a major percentage of computer graphics artists are also responsible for 2D animation, thereby only rarely creating 3D animations given the specialization level required for 3D.

Some stakeholders prefer to use the services of animators who followed traditional training, more focused on the artistic aspect. Depending on each individual, this training could allow animators to develop a more comprehensive basic competency.

Mastery of the technology nonetheless remains essential in order to evolve on the labour market.

2D and 3D animator may be an entry-level position in a company. We therefore separated the tasks of 2D and 3D animators depending on whether they are carrying out their tasks at the beginner or experienced level. The beginner level includes responsibilities normally assigned to an individual during his or her first year and a half on the job. The experienced level comprises tasks assumed by an individual who has mastered his or her role in a company. This person normally has at least eighteen months of experience. The competencies of the two levels of experience are classified under the headings “professional competencies” and “behavioural competencies”.

Tasks	Professional competencies	Behavioural competencies
<p><i>Beginner</i></p> <ul style="list-style-type: none"> • Understanding of the graphic interface specifications • Analyzing dope sheets on paper or in digital format • Modeling certain parts and shapes • Preparing characters for animation • Selecting and applying textures, colours and lights • Animating and creating part of the movements • Creating a rendering • Touching up animations • Transferring and compressing productions • Keeping abreast of new animation tools <p><i>Experienced</i></p> <ul style="list-style-type: none"> • Participating in the evaluation of the technical feasibility of the project • Analyzing the specifications of the interactive script development • Producing dope sheets on paper or in digital format • Modeling parts and shapes • Preparing characters for animation • Selecting and applying textures, colours and lights • Animating and creating movements • Creating a rendering • Touching up animations • Compressing and archiving productions • Staying abreast of innovations and new products • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to process fixed and animated images • Ability to execute 2D and 3D graphic modeling • Knowledge of multimedia creation tools in technical environments (PC or Mac) • Knowledge of Internet and multimedia technologies, their possibilities and their limitations • Ability to evaluate, analyze and resolve operational problems • Ability to quickly learn and adapt to new computer tools • Ability to program expressions in 3D software • Ability to demonstrate autonomy when updating technology-based knowledge <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to create animations • Ability to execute interface design • Ability to create graphic designs • Ability to visually compose • Ability to distinguish between shapes, volumes and details • Ability to visualize and envision geometric shapes and objects in space • Ability to organize one's work, and to manage files and folders • Ability to analyze the synchronization of a movement and to reproduce it • Knowledge of the principles of traditional animation • Artistic background 	<ul style="list-style-type: none"> • Ability to respond to a specific request • Artistic sense • Attention to detail • Methodical approach • Ability to analyze, synthesize and conceptualize • Creativity • Openness to criticism • Team spirit • Resistance to stress • Ability to respect deadlines • Flexibility

8. INTEGRATOR

Presentation

Most firms in the multimedia sector employ one or more individuals qualified to fulfil an integrator role. The integrator develops programs allowing for the operation of a multimedia product. In a normal environment, he is normally involved at the end of the production process.

We classified the programmer and integrator titles under a single profile. Some workers execute tasks that focus more on programming while others focus on the integration of different components of the multimedia product.

Those referred to as integrators often use software to minimize programming tasks. Therefore, this profile has two focuses.

Compared to other roles described in this document, the integrator duties essentially require technical competencies. We have in fact noted that the execution of the duties involved do not generally require artistic competencies.

Integrators are very rarely called on to touch up certain images. This artistic competency would therefore help to accelerate the integration of multimedia components during the final stage of production.

The integrator role may be an entry-level position in a company. We therefore separated the tasks of integrators according to the beginner and experienced levels.

The beginner level involves tasks normally assigned to an individual during his or her first year and a half of work. The experienced level involves tasks executed by an individual who has mastered his or her role in a company, and normally has at least eighteen months of experience. The competencies for the two levels of experience are classified under the headings “professional competencies” and “behavioural competencies”.

Tasks	Professional competencies	Behavioural competencies
<p><i>Beginner</i></p> <ul style="list-style-type: none"> • For segments of projects, planning and devising the work calendar according to schedules and objectives • Drafting adequate specifications for the program • Devising documents based on scripts in order to test programming modules and the data to process • Using proper programming techniques to ensure a stable environment • Designing improvements or modifications to programs • Diagnosing and resolving problems in the programming modules • Optimizing integration to facilitate the test process for the product • Ensuring adequate data archiving • Ensuring technological intelligence <p><i>Experienced</i></p> <ul style="list-style-type: none"> • Analyzing the interactive script development, functional specifications and data models • Participating in the definition of the work protocol • Planning and establishing the work calendar according to project schedules and objectives • Drafting precise specifications for the program • Devising scripts for testing the programming modules and the data for processing • Analyzing the technical approaches of the other members of the production team and recommending solutions • Conceptualizing, optimizing, integrating and validating the programming elements and data for processing • Ensuring the integrity of the data and the performance of adopted solutions • Ensuring adequate archiving and classification of data • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to execute the media montage with the assistance of authoring software for the delivery • Ability to edit and draft scripts • Ability to assemble the mock-up • Ability to execute the interactive conception and to produce it • Ability to evaluate, analyze and resolve operational problems • Ability to produce the mock-up for on-line distribution • Knowledge of Internet and multimedia technologies, their possibilities and their limitations • Knowledge of publishing software, technological innovations and their integration in the production process • Knowledge of creation tools for multimedia and of operating systems in technical environments (PC or Mac) • Knowledge of programming languages, databases, their capabilities and their technical limitations • Ability to process fixed and animated images • Ability to demonstrate autonomy when updating technology-based knowledge • Ability to adapt the interactivity of pages • Ability to quickly learn and adapt to new computer tools • Ability to evaluate the technical feasibility of the project • Ability to use the software code provided • Understanding of the approaches used to develop, integrate and implement the Web site • Understanding of system tools and techniques for the development and planning of applications • Ability to assemble a computerized presentation (desktop presentation) • Ability to digitize sources • Ability to ensure quality control • Knowledge of the technical constraints associated with the different Web browsers • Knowledge of Anglophone computer terminology • Ability to produce sound effects and video <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to adapt one's product to user needs and habits • Ability to organize one's work, and to manage files and folders • Ability to touch up the graphic components of the product so as to integrate them into the production 	<ul style="list-style-type: none"> • Methodical approach • Perseverance • Ability to respond to specific requests • Attention to detail • Ability to analyze, synthesize and conceptualize • Observance of instructions and deadlines • Resistance to stress • Ability to devise and respect schedules • Autonomy • Curiosity for and interest in one's field of specialization • Initiative • Team spirit

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- Understanding of the creation process

9. WEB DESIGNER

Presentation

The Web designer combines artistic and technical competencies to design Web sites. Although this role comprises an inevitable technical component in multimedia, it focuses primarily on the artistic aspect of the work.

The Web has experienced phenomenal growth in recent years. This explains the fact that positions at companies involved in the preparation of products for the Web are only now beginning to be more specialized. We have noted that some large companies have the positions of Web developer, Web

designer and Webmaster. These three roles are involved at different stages of the production process, specifically conception, design and maintenance, including changes and contact with users. At smaller companies, we often find a single position, often referred to as Webmaster, which covers all three aspects.

Identifying tasks assigned to the Web designer has represented a specific challenge owing to the low level of specialization in companies. We therefore decided it would be preferable to limit ourselves to a single level, specifically the experienced level.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Creating, optimizing and implementing components for the Web • Writing and designing basic programming elements • Designing navigation on the Web site • Defining the site architecture • Participating in designing the site's tree structure • Collecting and organizing the information to be included on the site • Defining the graphic aspect of the Web pages by integrating design concepts in collaboration with the computer graphics artist • Participating in the design and improvement of images, videos and sound • Participating in the analysis of the needs of clients and the target public • Testing the effective operation of the site • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to execute 2D and 3D graphic modeling • Knowledge of multimedia creation tools in technical environments (PC or Mac) • Knowledge of the languages used for programming a Web site • Knowledge of Internet and multimedia technologies • Ability to execute and produce the interactive conception • Ability to process the documents intended for the Web • Understanding of the approaches used to develop, integrate and implement a Web site • Understanding of the system tools and techniques for the development and planning of applications • Ability to demonstrate autonomy when updating technology-related knowledge • Ability to quickly learn and adapt to new computer tools • Ability to operate change control mechanisms • Ability to integrate the media necessary for on-line distribution • Ability to use the software code provided • Ability to participate in the production of sound effects and video documents <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to create graphic design • Ability to execute interface design • Ability to compose the visual aspect • Ability to create on-screen illustrations • Ability to research information and images • Ability to adapt one's Web site to user needs and habits • Ability to convey and organize information with the assistance of visual cues (e.g. icons) that are universally recognized • Ability to evaluate, analyze and resolve operational problems • Ability to design and adapt the interactivity of pages • Ability to organize one's work, and to manage files and folders • Ability to manage a segment of a project and a work plan • Ability to evaluate the feasibility of the design component of the project • Ability to contribute to the development and production management • Ability to distinguish between shapes, volumes and details • Ability to visualize and envision geometric shapes and objects in space • Ability to create animations • General knowledge of the legal framework applicable to private life and copyrights 	<ul style="list-style-type: none"> • Artistic sense • Attention to detail • Creativity • Ability to analyze, synthesize and conceptualize • Verbal and written communication • Methodical approach • Team spirit • Openness to criticism • Autonomy • Initiative • Resistance to stress

-
- Artistic background

10. MARKETING DIRECTOR

Presentation

The priority of marketing directors is to increase client loyalty. In this context, marketing by means of databases gains in importance compared to more traditional tools, such as advertisements. In fact, databanks provide insight into the socio-economic profile and buying habits of clients, and thereby help to create more effective targeted promotions. Consequently, managers with knowledge in the realm of database marketing

Competencies in direct marketing are also in high demand since budget increases are to be expected in this field. Knowledge of the media used for direct marketing (admail, telemarketing, catalogues, electronic and print media) is an asset. Lastly, the advent of the electronic highway will change habits associated with marketing and sales. Managers capable of optimizing the use of this new tool will be in high demand.

have an advantage.

Owing to the fact that this profile has an approach that is different from the previous ones, it requires a few clarifications.

On Page 37, the left-hand column lists the tasks of a marketing director as identified by the individuals consulted during the study.

The centre column presents the competency profile, specifically the abilities a person must have in order to execute the tasks or activities required by a job. The competencies rely on highly specific knowledge, skills, attitudes and behaviour. Some tasks require specific competencies in order to be accomplished properly, while others do not. It is also possible that a given competency allows for the accomplishment of several distinct tasks.

Although the formulation of a task and a competency may appear similar, it is important to not lose sight of the fundamental differences between the two.

Tasks	Professional competencies	Attitudes and behaviours
<p>Analyzing the market and positioning products</p> <ul style="list-style-type: none"> Analyzing the environment Analyzing the clientele Analyzing the competition Characterizing the product Selecting a target segment Determining the product's strategic position Implementing an industry watch 	<p>Analyzing the market and positioning products</p> <ul style="list-style-type: none"> Analyzing the technological, economic and sociocultural environment Analyzing the clientele Analyzing the competition Characterizing products Selecting a target segment Determining the strategic position of products Ensuring technological, economic and sociocultural intelligence, particularly with regard to new trends 	<ul style="list-style-type: none"> Drive Availability Interest and ambition People skills Positive attitude Tolerance Flexibility Self-confidence Perseverance Ability to listen to colleagues and support technicians
<p>Devising a marketing plan</p> <ul style="list-style-type: none"> Participating in the determination of product characteristics Participating in price-setting Selecting performing distribution channels Devising a promotion strategy Assessing possibilities for strategic alliances Evaluating the plan's impact and adjusting product marketing 	<p>Devising a marketing plan</p> <ul style="list-style-type: none"> Participating in the determination of product characteristics Participating in price-setting Selecting distribution channels Devising a promotion strategy <ul style="list-style-type: none"> - Advertising - Promotional activities - Public relations Evaluating possibilities for strategic alliances 	<ul style="list-style-type: none"> Sense of responsibility Autonomy Honesty and integrity Punctuality
<p>Promoting company products and the corporate image</p> <ul style="list-style-type: none"> Designing and producing promotion activities Designing and producing an advertising campaign Designing and developing promotional tools including the Web site Participating in trade shows Overseeing public relations for the company Generating prospects 	<p>Designing, producing and placing advertising material</p> <ul style="list-style-type: none"> Establishing and presenting the logo and trademark among a target clientele Executing advertising placement: magazines, newspapers, etc. Selecting media in accordance with target clienteles Managing the advertising budget <p>Designing and carrying out promotion activities</p> <ul style="list-style-type: none"> Organizing conferences for product launches Organizing press tours Participating in trade shows Prioritizing shows in accordance with marketing objectives Ensuring post-show follow-up 	
<p>Administrating the department</p> <ul style="list-style-type: none"> Managing human resources Managing material resources Devising, following and evaluating the budget Coordinating efforts with other departments 	<p>Designing and producing promotional tools</p> <ul style="list-style-type: none"> Drafting and producing promotional material on products Participating in the development of advertising material Preparing material for demonstrations Designing sales tools: documentation, admail, brochures Designing product packaging Using the Web site for conveying product information to clients 	
<p>Contributing to the establishment of the corporate vision and orientations</p>	<p>Producing public relations activities</p> <ul style="list-style-type: none"> Networking Conferences Newspaper and magazine articles Media relations 	

Evaluating the impacts of a marketing initiative

- Evaluating the plan and adjusting the marketing according to the growth of company sales according to available resources

Knowledge and skills

Competencies shared by the positions of Marketing Director and Sales Director

Technical aspect

- Knowledge of the Windows environment
- Ability to use a word processing application, an electronic spreadsheet and a database
- Ability to use the Internet and its applications
- Ability to use presentation software

Content aspect

- Knowledge of marketing research and market analysis techniques
- Knowledge of survey techniques
- Knowledge of the principles of international trade
- Ability to define the vision, mission and statement of corporate values
- Knowledge of the specific aspects of telemarketing
- Knowledge of marketing strategy development techniques
- Knowledge of marketing positioning tactics
- Knowledge of Internet marketing techniques
- Knowledge of market segmentation techniques
- Knowledge of price definition models
- Knowledge of how to adjust the marketing plan
- Knowledge of branding strategies
- Knowledge of merchandising techniques (only for products intended for the general public)
- Knowledge of product life cycles and effects on distribution
- Ability to compare the efficiency of distribution channels
- Knowledge of the field and business opportunities

Management aspect

- Ability to plan work
- Basic knowledge of budgeting and accounting
- Knowledge of human resources management
- Basic knowledge of general administration

General knowledge and abilities

- Knowledge of the art of negotiating
- Ability to popularize the technical language
- Ability to draft reports and brochures
- Ability to communicate easily
- Multilingualism
- Ability to analyze and synthesize
- Basic legal knowledge (distribution contracts, royalties, advertising, technology transfers, product licenses, derived rights, etc.)
- Visionary spirit

Planning one's work and managing one's time

Making oral presentations

- within the framework of professional activities
- within the framework of seminars and conferences

Drafting documents

- drafting reports
- drafting newspaper and magazine articles

Using computer tools and software

- Computer workstation
- Various software applications:
 - Presentation
 - Office technology
 - Accounting
- Internet navigation

Coordinating a work team

- Administering a department
- Devising and following the budget
- Managing human resources
- Managing material resources
- Coordinating activities with other departments

Learning independently

- Recognizing one's learning needs
- Planning one's learning activities
- Determining one's objectives
- Selecting one's activities
- Achieving one's learning
- Evaluating one's learning

11. SALES DIRECTOR

Presentation

The intensifying competition alters the role of the Sales Director. This individual must be able to manage change, thereby allowing the sales personnel to identify, understand and accept changes.

The sales director must also encourage representatives to carry out more analysis and planning, and must insist on the importance of the long-term relationship with the client.

The sales director will increasingly have access to sales software connected to merchants. Lastly, owing to his or her knowledge of client needs, the sales director participates more and more in the design of strategies with other corporate leaders.

Because this profile has an approach that is different from the previous ones, it requires a few clarifications.

On Page 40, the left-hand column lists the tasks of the sales director as identified by the individuals consulted during the study.

The centre column presents the competency profile, specifically the abilities a person must have in order to execute the tasks or activities required by a job. The competencies rely on highly specific knowledge, skills, attitudes and behaviour. Some tasks require specific competencies in order to be accomplished properly, while others do not. It is also possible that a given competency allows for the accomplishment of several distinct tasks.

Although the formulation of a task and a competency may appear similar, it is important to not lose sight of the fundamental differences between the two.

Tasks	Professional competencies	Behavioural competencies
<p>Planning sales</p> <ul style="list-style-type: none"> • Establishing sales strategies • Setting sales objectives • Determining sales approaches • Developing sales tools • Designing and putting in place a client information system • Evaluating client satisfaction • Evaluating sales 	<p>Determining the objectives and strategies for the sales department</p> <ul style="list-style-type: none"> • Determining the objectives for the entire department • Determining objectives for each product, territory and sales representative • Selecting avenues and means while taking into account the available resources 	<ul style="list-style-type: none"> • Self-confidence • Autonomy • Good listening skills • Perseverance • Empathy • Creativity • People skills • Ability to organize • Resourcefulness • Sense of responsibility
<p>Managing the sales team</p> <ul style="list-style-type: none"> • Recruiting sales personnel • Training sales personnel • Supervising and motivating sales personnel • Evaluating the performance of sales personnel 	<p>Determining sales approaches and developing tools</p> <ul style="list-style-type: none"> • Devising sales tools: <ul style="list-style-type: none"> - Brochures and flyers - Electronic presentation - Simulated demonstration - Telemarketing scripts • Designing and putting in place a client information system 	
<p>Managing the distribution channels</p> <ul style="list-style-type: none"> • Identifying distributors • Negotiating contracts with distributors • Ensuring follow-up with distributors • Evaluating the performance of distributors 	<p>Recruiting and training sales representatives</p> <ul style="list-style-type: none"> • Determining profiles • Conducting interviews • Selecting sales personnel • Training sales personnel: <ul style="list-style-type: none"> - Devising training plans - Organizing activities - Providing training - Evaluating learning activities 	
<p>Selling products</p> <ul style="list-style-type: none"> • Responding to information requests from clients • Converting prospects into clients • Evaluating client needs and proposing solutions • Presenting the product • Preparing bids • Negotiating and administering contracts • Ensuring follow-up 	<p>Supervising the work of sales personnel</p> <ul style="list-style-type: none"> • Coordinating the work • Evaluating the performance of sales personnel • Supporting and motivating sales personnel 	
<p><i>Administering the sales department</i></p> <ul style="list-style-type: none"> • Developing and monitoring the budget • Managing human resources • Managing material resources • Coordinating one's activities with other departments 	<p>Managing distribution channels</p> <ul style="list-style-type: none"> • Identifying distributors • Negotiating contracts with distributors • Evaluating the performance of distributors 	
<p>Contributing to the development of the corporate vision and orientations</p>	<p>Selling products</p> <ul style="list-style-type: none"> • Responding to information requests • Finding clients • Evaluating client needs and proposing solutions • Presenting the product • Preparing bids • Negotiating and administering contracts • Following up on sales 	
	<p>Evaluating the impacts of a sales initiative</p> <ul style="list-style-type: none"> • Evaluating sales • Evaluating client satisfaction • Identifying factors for success and failure • Selecting and implementing corrective 	

measures

Knowledge and skills

Competencies shared by the positions of Marketing Director and Sales Director

Technical aspect

- Knowledge of the Windows environment
- Ability to use a word processing application, an electronic spreadsheet and a database
- Ability to use the Internet and its applications
- Ability to use presentation software

Content aspect

- Knowledge of the market and the product
- Knowledge of the sales process
- Knowledge of sales techniques
- Knowledge of merchandising
- Knowledge of marketing via databases
- Knowledge of direct marketing
- Knowledge of telemarketing
- Knowledge of electronic trade
- Knowledge of international trade
- Ability to convince and persuade
- Ability to present the product (demonstration, trade shows, etc.)
- Ability to negotiate
- Ability to develop proposals
- Ability to organize a training activity
- Ability to conduct inquiries and surveys
- Knowledge of the product life cycle
- Technological knowledge of the product
- Knowledge of local distribution networks
- Knowledge of foreign distribution networks
- Knowledge of the environment and business opportunities

Management aspect

- Basic knowledge of budgeting and accounting
- Knowledge of management styles
- Basic knowledge of general administration (management)
- Ability to plan work
- Ability to exercise leadership (guide, motivate)
- Ability to select sales personnel
- Ability to evaluate sales personnel

General knowledge and skills

- Knowing how to draft reports, brochures, etc.
- Ability to express oneself verbally (presentation, conferences, etc.)
- Ability to communicate easily
- Ability to learn independently
- Ability to analyze and synthesize

Planning one's work and managing one's time

Preparing verbal presentations

- Within the framework of professional activities
- Within the framework of seminars and conferences

Drafting documents

- Drafting reports
- Drafting newspaper and magazine articles

Using computer tools and software

- Computerized workstation
- Various software applications:
 - Presentation
 - Office technology
 - Accounting
- Internet navigation

Coordinating a work team

Administering a department

- Establishing and respecting the budget
- Managing human resources
- Managing material resources
- Coordinating one's activities with other departments

Learning independently

- Recognizing one's learning requirements
- Planning one's learning
- Determining one's objectives
- Selecting one's activities
- Achieving one's learning
- Evaluating one's learning

IV. APPENDIX

COMPOSITION OF THE WORK COMMITTEES FOR THE TWO STUDIES ON WHICH THIS DOCUMENT IS BASED

I- Competency profiles for strategic occupations in the multimedia industry

Normand Beaudet
Multimedia producer
Intellia
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en multimédia du Québec –
APMQ)

Sylvie Gagnon
President – Chief Executive
Officer
TECHNOCompétences

Christian Grégoire
Training Director
Multimedia Consortium
CESAM

Bruno Légaré
Producer
Micro-Intel

**Micheline L'Espérance-
Labelle**
IBWeb President
Representative of the Forum
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Carole Pageau
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Robert Blake, Cendrik
Gilles Boulet, Télé-
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Harold Gendron,
Association
des producteurs en
multimédia du Québec
(APMQ)

II- Profiles of occupations related to marketing in the software and multimedia products industries.

Véronique Aubry
Business Development
Director
Centre de promotion du
logiciel
québécois

Alain Aubut
President
Diffusion Multimédia
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Yvon Bernatchez
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Direction du multimédia et
des services électroniques
Ministère de la Culture et des
Communications

Josée Courville
Marketing Director
Informission

Sylvie Gagnon
President-Chief Executive
Officer
TECHNOCompétences

Christian Grégoire
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Consortium Multimédia
CESAM

Carole Pageau
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TECHNOCompétences

V.
Addendum (May 2000)
Competency profiles

1.	Multimedia Producer	50
2.	Interactive Multimedia Training Designer	52
3.	Webmaster	54

V.
Addendum (May 2000)
*Competency profiles for the three other
multimedia occupations*

INTRODUCTION

In addition to the eleven occupational profiles presented earlier, in winter and spring 2000, TECHNOCompétences produced three additional profiles:

- Multimedia producer
- Interactive multimedia training designer¹
- Webmaster

We would like to express our gratitude toward the experts and professionals consulted during the production of these profiles. Their generosity with their time, and their expertise has been exemplary.

PricewaterhouseCoopers developed these profiles based on a methodology similar to that used for the other profiles, yet with slight differences.

Methodology

Our study was conducted between the months of February and April 2000 in accordance with the following key steps:

1. *Review of secondary sources in order to prepare a draft of the occupation's context and to identify certain tasks, as well as professional and behavioural competencies.* We consulted local, national and international publications on the industry and on occupations in the multimedia sector, Web sites for professional associations, as well as job postings for targeted positions.²

Data collection was ensured primarily with the assistance of the PricewaterhouseCoopers Documentation Centre, the Internet and our bibliographies. We also contacted a series of key informers who provided us with avenues for research and pointed us toward different sources.

2. *Telephone interviews to enrich the draft competency profiles.* We questioned close to twenty industry members, the vast majority of whom were professionals in targeted occupations.³ These telephone interviews, which lasted approximately 50 minutes each, made it possible for us to produce preliminary versions of the three competency profiles that included a presentation of the position, and a list of tasks and professional and behavioural competencies. To ensure the interview ran smoothly, prior to the event, participants received a draft of the profile as well as a directory of competencies.

1 During the course of our consultations, the stakeholders in the milieu recommended that we replace the title "computer-assisted training designer" with "interactive multimedia training designer". This second name corresponds more to market realities in addition to being less restrictive. The title *interactive multimedia training designer* was retained and is used in this document.

2 Appendix B presents a detailed bibliography.

3 Appendix A presents a list of participants.

-
3. *Enrichment and validation of the competency profiles.* To validate the preliminary versions of the three competency profiles, TECHNOCompétences brought together professionals practicing the occupations identified for half-day work sessions. These sessions made it possible to collect information on the context of the occupation and also, to finalize the list of tasks associated with each of the three occupations and review the competencies required in the industry to execute the tasks identified.

It should be noted that the validation and enrichment session for the interactive multimedia training designer brought together university and industry professionals working in these fields of expertise. The validation and enrichment session for the Webmaster profile was held in the presence of volunteer observers from different backgrounds. A question and discussion period organized at the end of the validation session led to productive exchanges between participants and observers.

The three targeted occupations

Selection of occupations

At the request of stakeholders in the multimedia milieu, TECHNOCompétences decided to complete the series of multimedia competency profiles with the following three occupations: multimedia producer, interactive multimedia training designer and Webmaster. In the case of the Webmaster profile, it became apparent from the start of our work that the Webmaster title referred to several types of positions.

Hence, before beginning the preparation of the profile, we identified the different types of positions that could be grouped under the term Webmaster. For example, in certain companies, the positions identified as Webmaster comprise the duties associated with project management, while others are more general. After consideration, we decided to develop a competency profile for general Webmaster, referring specifically to the head Webmaster who is responsible for the different Web activities in an organization. Several smaller companies or those with a site that is essentially informative, employ this type of Webmaster. In comparison, the titles of multimedia producer and interactive multimedia training designer relate to a series of more homogeneous tasks in the multimedia industry. For the producer profile, we consulted the *Association des réalisateurs et réalisatrices du Québec*. This association provided us with information within the framework of our interviews, as well as with the names of producers in the multimedia milieu.

Structure of the competency profiles for targeted occupations

For each of the three selected occupations, we decided to present profiles by using a format identical to the one used in the first study. The information is classified under three distinct sections, which respectively present a brief presentation of the occupation, a list of associated tasks, as well as a competency profile.

The presentation of the occupation begins with a brief definition of the role. We then describe the possible variations in this role at different companies, the type of employer, and the training. Where the context allowed, we also included certain comments collected during the interviews with industry professionals.

The list of tasks presents the main elements in the form of short statements. This list includes all tasks entrusted to position incumbents. It is representative of all companies yet specific to none. We also attempted to reflect the reality of the work in large and small companies.

In this document, we define competencies as being all the behaviours leading to superior performance or satisfaction within the framework of a given position. The term “competency” comprises knowledge, know-how, aptitudes, personal qualities or personality traits that affect work performance.

The competencies are classified under two categories, particularly professional competencies and behavioural competencies. The professional competencies comprise three aspects, specifically the technical aspect, the content aspect, and the management aspect (if applicable). The number of relevant professional competencies was not limited, owing to the fact that our objective was to cover all the professional competencies necessary for the execution of tasks for all companies in the industry.

This list presents all the competencies identified by our informers. The behavioural competencies mainly include aptitudes, personality traits or personal qualities. The number of these competencies was limited to twelve per occupation so as to emphasize the ones that are the most significant with regard to the execution of duties associated with each occupation.

1. MULTIMEDIA PRODUCER

Presentation

The multimedia producer coordinates the development and production of multimedia products or services, backed by a team of computer graphics artists, integrators, programmers, a script developer, 2D and 3D animators, etc.

This individual ensures the project's evolution from the artistic, technical and computer angles, from conception to finalization.

The multimedia producer works in collaboration with a producer. The former essentially focuses on production and human resources management, while the second oversees management of client relations and financial matters.

The term “producer” is borrowed from the audiovisual industry. The maturation of the Québec multimedia industry demonstrates increased use of the producer title and role. Producers are found in companies specializing in multimedia and in the self-employment market.

Multimedia producers must be highly versatile, since they must be familiar with traditional audiovisual media and new media. Training for multimedia producers is highly heterogeneous. Multimedia producers normally possess basic training in one multimedia speciality, and experience on production teams, or as producers for traditional media.

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Assuming responsibility for management of the content creation process and the interactivity • Participating in the definition of the specifications of the client's expectations and requirements (once the contract is signed) • Preparing the detailed documentation describing the finished product • Participating in technological choices • Devising the production method • Ensuring the cohesiveness of the work • Ensuring that the content remains properly adapted to the objectives set and the groups targeted • Documenting, in writing, the project's progress • Maintaining communication between the different team members • Heading the project team • Ensuring coordination between the client and the project team with regard to the content prepared by the client • Participating in the selection of external suppliers • Reviewing the quality of deliverables obtained from external suppliers • Reviewing the quality of deliverables intended for clients • Ensuring that the budget and schedule are respected • Ensuring technological and competitive intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to evaluate, analyze and resolve operational problems • Ability to assess technical and graphic feasibility • Ability to demonstrate autonomy when updating technology-based knowledge • Ability to manage production with audiovisual and computer supports • Ability to oversee quality control • Knowledge of every step involved in production • Knowledge of audiovisual supports • Knowledge of the use of Internet and multimedia technologies, their possibilities and their limitations • General knowledge of multimedia creation tools in technical environments (PC/Mac/Unix) • Knowledge of approaches used for the development, integration and implementation of a Web site <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to adapt one's product to user needs and habits • Ability to assess the quality of the relationship between the content and the interface design • Ability to integrate interactivity into communication • Ability to understand the creation process • Ability to structure and synthesize the information to be conveyed • Ability to popularize the information to be conveyed • Knowledge of the Internet and of Web surfers • Knowledge of the legal framework applicable to private life and copyrights • Knowledge of the ergonomics associated with new media • Knowledge of the basic concepts of communication • Knowledge of script development techniques <p><i>Management aspect</i></p> <ul style="list-style-type: none"> • Ability to assess the feasibility of the project • Ability to channel the creativity of team members • Ability to manage multidisciplinary resources in a production context • Ability to manage a project and work plan by using the appropriate management tools • Ability to continuously update the project's progress • Ability to make decisions • Ability to respect the budget 	<ul style="list-style-type: none"> • Leadership • Team spirit • Ability to analyze, synthesize, and conceptualize • Interpersonal relationships • Verbal and written communication • Flexibility • Ability to persuade and influence • Methodical approach • Resistance to stress • Openness to criticism and ability to criticize • Creativity

2. INTERACTIVE MULTIMEDIA TRAINING DESIGNER

Presentation

The interactive multimedia training designer devises the optimal strategies and learning tools used within the framework of interactive multimedia training. This professional who specializes in educational technologies is also an expert in the art of designing interactive learning environments. The training product may be developed on-line on the Web, via an Intranet or on an off-line educational CD-rom.

Interactive multimedia training designers join the development teams along with the training content experts and technical experts (computer graphics artist, integrator, etc.).

For smaller projects, they may oversee management of the development project.

They normally have advanced university training in the field of education technologies. They work mainly for specialized firms or departments operating in the field of training, or are self-employed workers.

The use of technologies in the field of training is not a new concept, although technological advancements over the past decade have made it possible to deliver high-calibre interactive multimedia training on a broader scale. The training content is highly diversified. In fact, this training relies as much on knowledge and know-how as it does on self-management skills. In 2000, the designers did not generally specialize in specific types of training or students, although in the coming years it is expected that specializations will increase.

INTERACTIVE MULTIMEDIA TRAINING DESIGNER

Tasks	Professional competencies	Behavioural competencies
<ul style="list-style-type: none"> • Participating in the analysis of student needs • Developing learning strategies in accordance with training objectives, potential students, the content and the training context • Selecting the appropriate multimedia tools in response to the training objectives • Designing the training program by using an appropriate method (e.g. educational engineering, fast prototyping, system approach, etc.) • Modeling knowledge according to the training content, in collaboration with a content expert • Revising the material regularly during the development process • Testing the material with students during certain steps in the process • Devising the interactive script • Devising a coaching and implementation strategy • Following delivery to clients, evaluating the program and formulating recommendations in order to make any necessary changes 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Ability to quickly understand and adapt to new on-line and off-line computer tools • Ability to evaluate, analyze and resolve operational problems • Ability to assess the technical and graphic feasibility of the project • Ability to devise and produce the interactive concept • Ability to ensure quality control • Basic understanding of the system tools and techniques used for developing and planning applications • Knowledge of every step involved in production • Knowledge of the uses of Internet and multimedia technologies, their possibilities and their limitations • General knowledge of multimedia creation tools in technical environments (PC/Mac/Unix) <p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to devise interactive situations to retain students' attention • Ability to adapt one's product to student needs and habits • Ability to apply the basic concepts of communication • Ability to apply the principles of independent learning • Ability to apply pedagogic and adult education theories • Ability to apply ergonomic principles of new media • Ability to apply learning theories • Ability to assess the effectiveness of the product with regard to learning • Ability to evaluate the quality of the relationship between the content and the interface design • Ability to design and adapt training by integrating interactivity • Ability to manage content and activities in an interactive context • Ability to manage a segment of a project and a work plan • Ability to structure information in a coherent manner • Ability to transpose written content into interactive visual and sound content • Ability to popularize the information to be conveyed • In-depth knowledge of interactive script development 	<ul style="list-style-type: none"> • Autonomy • Verbal and written communication • Creativity • Ability to analyze, synthesize and conceptualize • Student orientation • Openness to criticism and ability to criticize • Interpersonal relationships • Observance of instructions and deadlines • Sense of organization • Concern for updating knowledge and competencies • Team spirit

3. WEBMASTER

Presentation

The Webmaster is the person responsible for management of a Web site (Intranet and/or Extranet), including the coordination and update of information presented and services offered. The competency profile below presents the position of general Webmaster.

In 2000, this type of Webmaster was found primarily at small and medium-sized companies, or those with an essentially informative Web site.

Depending on the work environment, the Webmaster may be called on to execute a series of tasks that are highly diverse, and associated with the management of the Web site or as project manager. Companies in the multimedia industry primarily identify the role of a Webmaster with that of a project manager. This Webmaster-project manager leads a multidisciplinary team composed of Web designers, computer graphics artists, programmers, content specialists, etc. Companies in other sectors that have a Web site assign one site manager to execute nearly all the tasks related to site maintenance. This Webmaster may be qualified as a

general Webmaster. Once the site becomes transactional or simply bigger, some organizations opt for the specialization of the Web team members with a Webmaster-project manager, or they divide the role of Webmaster into one person assigned to technical aspects and another to the content aspect.

At the advent of the Internet, Web sites were generally the responsibility of the computer department. A progressive migration is now under way towards communications and marketing divisions. In fact, the Web site is becoming a means for promoting the organization, and in certain cases, for performing business transactions.

The Webmasters originate either from the communications or the computer stream, depending on the role carried out. A high percentage of general Webmasters have hybrid training in communication and in computers. Until very recently, there were no structured training programs; individuals who were interested received their training on the job.

Tasks	Professional competencies	
<ul style="list-style-type: none"> • Coordinating the collection and organization of the information to include on the Web site • Defining the site architecture • Recommending navigation scripts for the Web site • Defining the graphic component of the Web pages by integrating design concepts in cooperation with the Web designer • Ensuring the optimal use of graphic and technical components • Executing or delegating programming tasks for updating or adding Web site components • Ensuring the quality and coherence of the site • Ensuring the security of the site in cooperation with the network administrator • Obtaining site traffic reports, analyzing them and popularizing the results • Ensuring technical support for users of the Web site • Ensuring the relationship between internal and external suppliers and surfers • Coaching and training Web site users • Ensuring the site's promotion • Ensuring technological intelligence 	<p><i>Technical aspect</i></p> <ul style="list-style-type: none"> • Knowledge of the uses of Internet and multimedia technologies, their possibilities and their limitations • Understanding the approaches used for developing, integrating and implementing a Web site • Ability to quickly learn and adapt to new computer tools • Knowledge of different platforms (PC/Mac or Unix) • Ability to evaluate, analyze and resolve operational problems • Ability to assess the technical and graphic feasibility of the project • Ability to optimize the media in accordance with the delivery • Ability to demonstrate autonomy when updating technology-related knowledge • Ability to edit and draft scripts • Ability to ensure quality control • Basic understanding of system tools and technologies used for developing and planning applications • Understanding of approaches used for developing, integrating and implementing the Web site • Knowledge of each production step • Knowledge of programming languages, databases, their capabilities and their technical limitations • Knowledge of publishing software, technological innovations and their integration in the production process • Knowledge of the use of Internet and multimedia technologies, their possibilities and their limitations • General knowledge of multimedia creation tools in different environments (PC / Mac or Unix) 	<p><i>Content aspect</i></p> <ul style="list-style-type: none"> • Ability to research information, documentation and images • Ability to adapt one's Web site to user needs and habits and to market trends • Ability to convey and organize information using universally recognized visual aids (e.g. icons) • Ability to design and adapt the interactivity of pages • Ability to manage a segment of a project and a work plan • General knowledge of the legal framework applicable to private life and copyrights • Knowledge of the Internet and Web surfers • Knowledge of the principles of writing for the Web • Ability to write for the Web • Ability to popularize the information to be conveyed • Knowledge of the basic concepts of communication • Knowledge of the principles of independent learning for Web surfers • Knowledge of the ergonomics of new media • Ability to create interactive situations apt to hold users' attention • Ability to assess the quality of the relationship between the content and the interface design • Ability to structure the information in a coherent manner • Ability to implement interactivity into communication

WEBMASTER

Behavioural competencies

- Autonomy
- Adjustment potential
- Ability to make decisions
- Verbal and written communication
- Ability to analyze, synthesize and conceptualize
- Leadership
- Ability to negotiate
- Customer service orientation
- Attention to detail
- Team spirit

Appendix A

LIST OF PARTICIPANTS IN THE TELEPHONE INTERVIEWS AND IN THE VALIDATION AND ENRICHMENT SESSIONS FOR THE COMPETENCY PROFILES

Producer

- Frédéric Amyot, Micro-Intel
- Jacques Augustin, consultant
- Hugo Comptois, Ix media
- Carl-Frédéric De Celles, Ix media
- Anik De St-Hilaire, Praxcim
- Éric Langlois, Laboratoire Idéclick
- Jean-Paul Thomin, Avalon Multimedia
- André Waquant, Made in Media

Interactive multimedia training designer

- Pierre Boucher, Midmultimédia
- Gary Boyd, Concordia University
- Lise Dampousse, Télé-Université
- Lyne Desrochers, Kraft Canada
- Bernard Dubreuil, Caravane Formation
- Sylvain Lefebvre, École Polytechnique de Montréal
- Jean Loisier, Université de Montréal
- Louise Marchand, Université de Montréal
- Bernard Michaud, Académie du multimédia
- Patrick Parent, Studio Virtuel Concept
- Renée-Claude Tremblay, Praxcim
- Richard Smith, Concordia University

Webmaster

- Diane Bélanger, ministère de l'Industrie et du Commerce
- François Desbiens, Développement Purkinje
- Julie Desgagnés, Io Media Solution
- Marc Desjardins, Banque Nationale
- Katie Dugas, Banque Laurentienne
- Myreille Gauthier, Association provinciale des constructeurs d'habitation du Québec (APCHQ)
- Eric Lebrun, Coopérative fédérée de Québec
- Sylvain Légaré, Infifix
- Diane Mercier, Ville de Montréal
- Yannick Préfontaine, Éditions Québec/Amérique
- Nancy Rochon, Télé-Université
- Marc Thériault, L.L. Lozeau
- Rémi Tremblay, consultant

Appendix B

BIBLIOGRAPHY

- Arts Training Australia, *National Multimedia Education & Training Strategy*, 1996.
- Association of Internet Professionals, *AIP Certification Accreditation Council – Introduction*, 2000 (<http://accredit.net/intro.html>).
- Association des réalisateurs multimédia au Québec, *La profession de réalisateur multimédia au Québec : rapport d'enquête*, 1999, 25 pages.
- Berger, François, "Webmestre, un nouveau métier en voie de... disparition", *La Presse*, Saturday, March 25, 2000, Section A, Page 8.
- Charette, Mario, *Le métier de Webmestre*, Idcllic Carrière et Formation site, 2000, (<http://idcllic.qc.ca>).
- Consortium multimédia CESAM, *L'infoguide des carrières en multimédia*, October 1998. (<http://www.lienmultimedia.com>).
- Conseil des ressources humaines du logiciel et PricewaterhouseCoopers, *Les profils de compétences dans l'industrie canadienne du logiciel*, August 1998.
- Human Resources Consultant in the Cultural Sector, *The Interactive Zone, Careers in New Media*, 1998.
- Grill, Emmanuelle and collaborators, *Les carrières du multimédia*, Les éditions Ma Carrière, 1999, 122 pages.
- Fougéa, Jean-Pierre, *Les 250 métiers du cinéma, de la télévision et des nouvelles technologies et les formations qui y conduisent*, Éditions Dixit, 1999, 178 pages.
- Josephson, Hal and Trisha Gorman, *Careers in Multimedia: Roles and Resources*, International Thomson Publishing Company, Washington, 1996, 290 pages. *Le Lien Multimédia*, Vol. 5, Issues 37 (November 8, 1999), 44 (January 10, 2000), 45 (January 18, 2000),

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- MULTIMEDIACANADA,
Premier guide canadien de l'industrie, published by Canadashow.com, 1999.
 - Info-tech, *Répertoire des entreprises en informatique et en technologie*, 1998-1999.
 - Illinois Institute of Technology, Internet Technology Webmaster, 2000, (<http://itwebmaster.iit.edu>).
 - International Webmaster Association, IWA Certified Web Professional Program, 2000 (<http://www.iwanet.org/profdevel/>).
 - Penn State University, Webmaster certificate, 2000 (<http://webmaster.outreach.psu.edu/>).
 - World Organization of Webmasters, Certified Professional Webmaster, 2000 (<http://joinwow.org>).