

3. Web and Multimedia

The increased affordability of computers with full multimedia capabilities, the growth of broadband internet services, and the dramatic growth of both gaming and mobile internet devices has caused demand for web and multimedia services to grow tremendously in the past decade. Typical services include sophisticated website development and maintenance, development of content for video games, preparation of multimedia presentations, and development of new internet-based educational programs.

a) Representative Operation – Content Development

The representative operation modeled performs process-oriented services, such as compiling basic multimedia content and developing standard websites. As illustrated in Exhibit 3.54, this operation is characterized by:

- Leased office space
- A technically oriented workforce that is heavily weighted toward junior programmers.

The business is assumed to operate as a stand-alone profit center.

b) International Results

International results are illustrated in Exhibit 3.55. These results reflect the combined impact of 26 location-sensitive cost components applied to the modeled operation. Detailed results, by key cost component, are presented in Exhibit 3.56.

c) Selected Cities

Exhibit 3.57 profiles results for selected cities, by country, from among the 95 cities featured in this report. Results for all other featured cities can be found in Chapter 4, Exhibit 4.7.

EXHIBIT 3.54 – WEB AND MULTIMEDIA		
Content Development – Summary of Operating Parameters		
Facilities Requirements		
Class A office space leased	22,500 ft ²	(2,090 m ²)
Other Initial Investment Requirements		
Office equipment – US \$'000	\$2,500	
Equity financing – % of project costs	67%	
Workforce		
Management	14	
Sales and administration	12	
Dedicated product development	82	
Customer support	2	
Total employees	110	
Energy Requirements		
Electricity monthly consumption/peak demand	120,000 kWh and 360 kW	
Other Annual Operating Characteristics		
Sales at full production – US \$'000	\$20,000	
Operating costs – % of sales	10%	
Investment in tax-eligible R&D – % of sales	–	

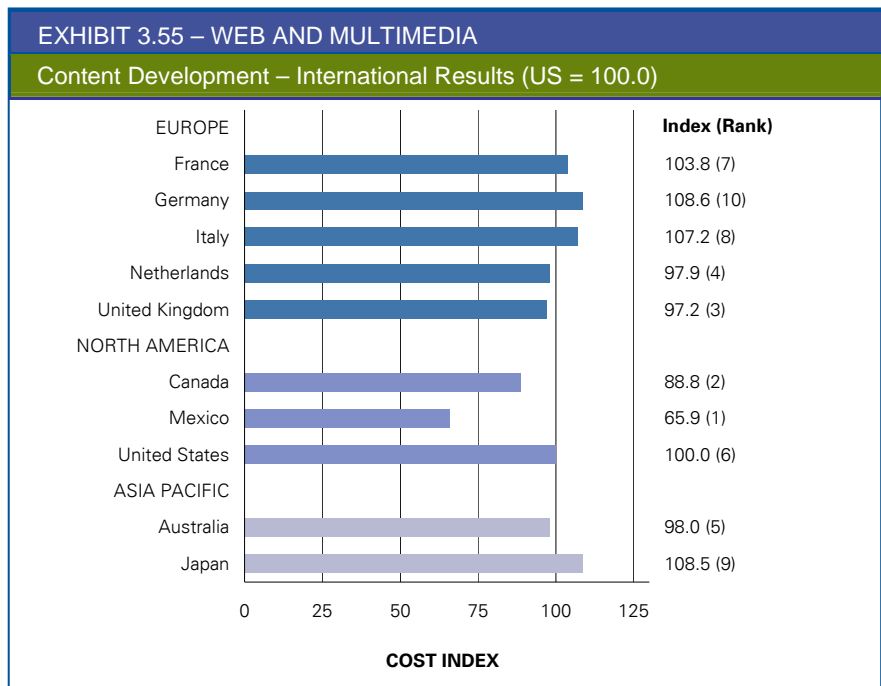


EXHIBIT 3.56 – WEB AND MULTIMEDIA

Content Development – Costs, by Major Component, US \$'000

	Europe					North America			Asia Pacific	
	France	Germany	Italy	Netherlands	UK	Canada	Mexico	US	Australia	Japan
Revenues	18,900	18,900	18,900	18,900	18,900	18,900	18,900	18,900	18,900	18,900
Costs										
- Salaries & Wages	7,694	10,666	8,808	8,821	8,081	8,196	4,516	8,763	8,857	10,040
- Statutory Plans	3,361	1,492	1,933	980	797	589	288	696	1,153	984
- Other Benefits	1,619	2,379	2,637	2,788	2,689	1,896	1,241	2,627	2,174	2,445
- Total Labor & Benefits	12,674	14,536	13,378	12,589	11,568	10,681	6,045	12,086	12,184	13,469
- Facility Lease	1,092	635	614	454	1,169	717	424	582	741	1,312
- Transportation	-	-	-	-	-	-	-	-	-	-
- Utilities	107	162	271	158	167	122	200	134	174	159
- Interest & Depreciation	318	387	362	230	224	228	(876)	311	88	408
- Non-Income Taxes	299	-	56	7	-	15	88	188	-	77
- Location-Insensitive Costs	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890	1,890
Profit Before Income Tax	2,521	1,292	2,329	3,573	3,883	5,249	11,129	3,710	3,824	1,587
- Income Taxes ¹	822	391	1,195	897	1,082	1,062	3,153	1,378	1,156	670
Effective Rate	32.6%	30.4%	51.3%	25.1%	27.9%	20.2%	28.3%	37.2%	30.2%	42.3%
After-Tax Profit	1,699	900	1,135	2,676	2,802	4,187	7,977	2,332	2,668	916
Total Annual Costs	17,202	18,001	17,765	16,224	16,099	14,714	10,924	16,569	16,233	17,984
Index (US=100.0)	103.8	108.6	107.2	97.9	97.2	88.8	65.9	100.0	98.0	108.5
Rank	7	10	8	4	3	2	1	6	5	9

¹ Income taxes may be either positive or negative, irrespective of whether profit before income tax is positive or negative, due to the impact of specific expense deduction rules, minimum taxes, and refundable income tax credits. Effective tax rates are not shown where results are not meaningful because of low profitability.

EXHIBIT 3.57 – WEB AND MULTIMEDIA

Content Development – Results for Selected Cities, by Country

Country and City	Index	Rank ¹	Country and City	Index	Rank ¹	Country and City	Index	Rank ¹
International Locations – All Cities						North America – Selected Cluster Cities		
AU Adelaide	94.0	41	JP Osaka	107.2	91	CA Halifax, NS	87.2	13
Brisbane	95.4	55	Tokyo	109.9	94	Saskatoon, SK	86.6	11
Melbourne	96.2	58			St. Catharines-Niagara, ON	88.3	15	
Sydney	99.8	78	MX Mexico City	66.1	2	Winnipeg, MB	86.6	12
			Monterrey	65.8	1			
FR Lyon	98.0	71			US Albuquerque, NM	94.5	44	
Paris	109.7	93	NL Amsterdam	98.7	76	Boise, ID	93.8	39
			Brabant Stad	97.7	70	Harrisburg, PA	94.8	47
GE Berlin	106.9	90	The Hague	97.1	64	Honolulu, HI	100.6	82
Frankfurt	110.4	95	Utrecht	97.4	68	Las Vegas, NV	96.9	61
					Oklahoma City, OK	91.6	29	
IT Milan	104.9	88	UK London	103.1	86	Salt Lake City, UT	94.6	46
Rome	109.5	92	Manchester	91.2	26	Wilmington, DE	97.3	67

¹ Rank among 95 cities.