Additional Projects to Accompany *Technically Write!* 7th Edition Chapter 5: Longer Informal and Semiformal Reports

Technically Write 7th Edition
Project A5.1 Researching Digital Phone Systems

You are a technician employed in H L Winman and Associates head office. Today, Susan Jenkins comes to you and says: "I've just come out of a management meeting, and I have a project for you."

Susan explains that the company has 15 telephones spread throughout the various offices: 3 at head office in Calgary, 2 at Macro Engineering Inc in Toronto, and 10 at branch offices across Canada. The machines vary in age from six to nine years old, and in their capabilities. The management committee has decided to buy 15 identical digital telephone systems with new technology incorporated into them, and simultaneously take advantage of a bulk purchase discount price.

"I want you to research what's new and to provide me with a report I can take back to the committee," Susan says, and then she lists questions articulated by members of the management committee, which she feels need to be addressed in your report:

1. Will the growing use of the internet and cell phones reduce the need for office phones, or even replace them?
2. What special features should the new digital telephones have?
3. Would it be better to purchase VOIP (voice over internet protocol) rather than just simple telephones?
4. What happens if we lose our internet connection? Is that likely to become a problem?
5. What about calls coming from non-digital lines? Are there compatibility issues we need to be aware of?
6. Will there be a trade-in or second-hand sale value for our telephone systems?
7. Must we have a separate, "dedicated" telephone line for the remaining fax machines, or can the digital line be used to receive faxes as well?

Write the report.

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Project A5.2 New Space for the Drafting Department

Assume that you are the senior draftsperson for Morton Consultants, Inc, a firm that occupies the second and third floors of the Hartland Building at 200 Broadway Avenue of your city. Yesterday the Chief Engineer (David Carter) called you into his office and assigned a Drafting Department relocation research project to you.

"The area on the third floor which the Drafting Department currently occupies is to become the location for the Marketing Department," he explained. "This means the Drafting Department will have to move in about six weeks. From what I can find out, there are three areas your department can move into." He shows you three sketches (see Figure A5.2) and describes them briefly to you.

"Area A is an L-shaped air-conditioned space of 147.65 m^2 in the basement. It's in the centre of the building and has no windows. Rent would be \$6.00/m^2 per month.

"Area B is a nearly square area of 169.74 m^2 on the third floor, close to where the Drafting Department is now and adjacent to the Engineering Department (which is useful, for direct communication between the engineers and the draftspersons). It has windows on the south and west sides, which make it rather warm in the summer, even with the air-conditioning on, but on the other hand it has the best view in the building. From the windows you would have a magnificent view of Memorial Park. And on sunny summer days you can watch the lunchtime concerts performed by various groups.

"The cleanest area (from obstructions such as pillars) is area C, a long room along the north wall of the second floor, measuring 24.4 m long and 6.1 m wide. It remains cool in the summer because it gets very little sun. It has the best windows and natural light in the building and is a very quiet area. Of course, it's not on the same floor as the Engineering Department, which would be a little inconvenient. And the rental cost for both areas B and C is \$8.00/m^2 per month."

You ask if a budget limitation has been established. "Not yet," he replies. "We will be depending on your recommendations. Just the same, I imagine about \$12 000 to \$13 000 a year for rent would be appropriate."

You study the existing Drafting Department and identify that 45 m^2 is taken up by drawing cabinets and printing equipment. You also check with Benedict's Space Anthology, which is a recognized industrial standard for working space for different types of occupations, and on page 98 it tells you that the recommended working area for a draftsperson, including desk, chair, CAD/CAM equipment, and a sketching table, is 9.5 m^2 per draftsperson.

Using this information, write your report and include a recommendation for the most suitable location.

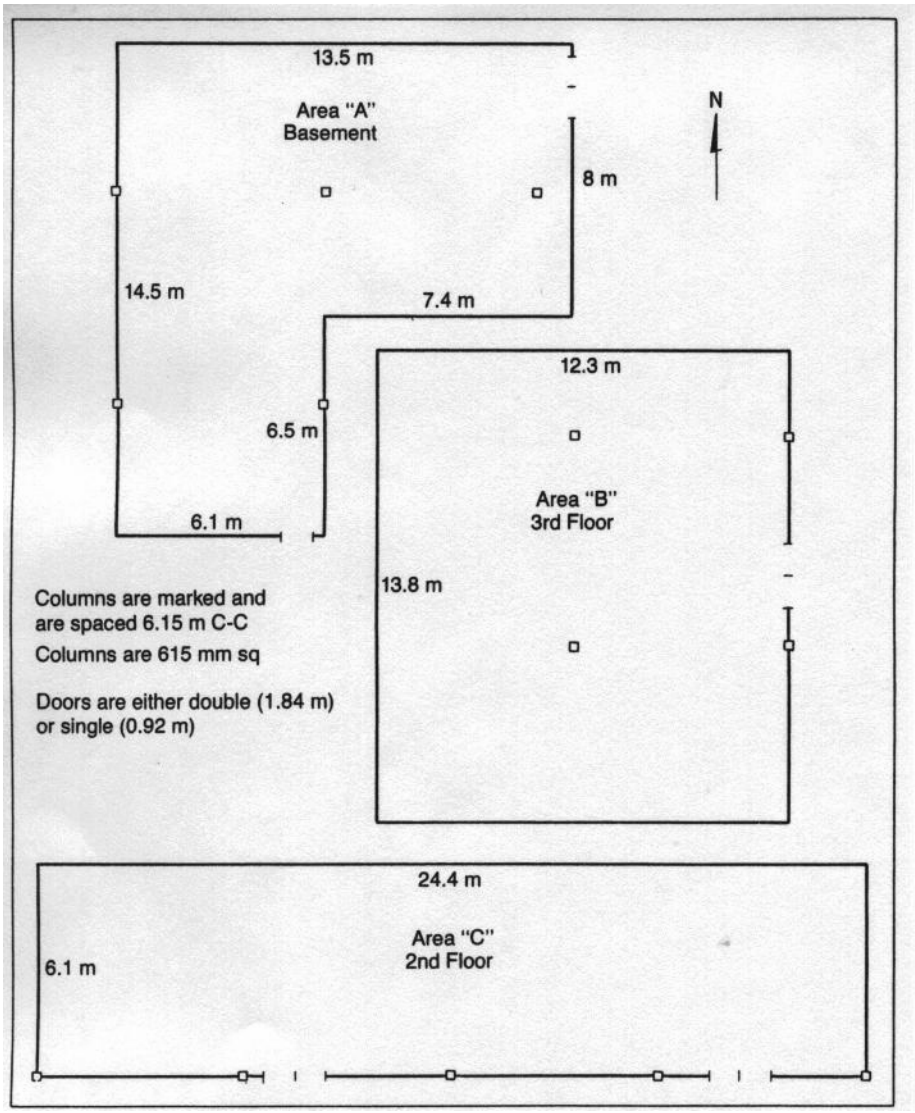

Figure A5.2 Proposed Locations for the Drafting Department

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Project A5.3 Selecting New Vans and Trucks

Assume that you are employed by Federal Industries Inc (FII) and that your boss is Technical Services Manager Tom Weston. Today, Tom comes to you and says: "We have been having a lot of breakdowns among the company vehicles over the past year. I want you to investigate their condition and recommend what you think should be done. Write me a report, because I will have to show it to the company directors to convince them to spend money on new vehicles."

Tom adds that about $60 000 is available in the budget for purchasing the new vehicles, and that you are to use that figure as a maximum. You proceed to talk to the managers in the different departments.

Wilf Friesen, in the Service Department, says he has two Nissan vans and a half-ton flatbed truck. One of the vans is eight years old and the other is five years old. The older van has accumulated 285 000 km on its odometer and the newer van has 190 000 km. The older van is rusty and breaks down frequently.

The Ford half-ton truck is nine years old. Its odometer is not working but Wilf says it travels some 30 000 km per year, which means it has probably accumulated 270 000 km. It has been a particularly troublesome vehicle, with repairs amounting to $2240 last year and $1080 the year before (these figures are for repairs only; scheduled maintenance costs were extra). Wilf says: "That's one truck we *have* to get rid of!"

In the Shipping and Receiving Department, Stores Manager Janet Toshak describes the department's vehicles to you: "We have a three-quarter ton Dodge flatbed truck which is in pretty good shape. It's three years old and it really doesn't get as much work as it should. Its odometer reads only 46 000 km, which is low mileage for a commercial vehicle.

"There's also a large three-ton Condor delivery van," she continues, "and it's quite a different story. Although it's old it doesn't give us much trouble. In nine years it has covered only 80 000 km. The distance is low because it stands stationary a lot of the time while deliveries are being made. It costs us about $1200 a year in maintenance and repairs, and I can live with that. A replacement would be very expensive."

Rennie Cartier is Marketing Manager. His technical sales representatives have three vehicles they use while they are making sales calls. "The best one is a three-year-old Toyota Rav 4. It has 88 000 km and gives us no trouble. The others are two eight-year-old Chevy pick-ups and they've really had their time: one has 215 000 km and the other 234 000 km."

Your investigation shows that four vehicles need to be replaced, at the following cost:

Nissan van	$23 000

Ford half-ton truck	$19 260
Chevy pick-ups (2)	$41 000
Total:	**$83 260**

You phone around to get potential trade-in values:

Nissan van	$ 2 500
Ford half-ton truck	$ 1 000
Chevy pick-ups (2)	$ 2 800
Total:	**$ 6 300**

When you calculate the total cost of purchasing the four new vehicles, and deduct the trade-in values, you find the total cost will be almost 30% more than the maximum budget quoted by Tom Weston. You need to find a cheaper way to meet the company's requirements.

You remember that Janet Toshak said her department's Dodge truck is not used as much as it could be. Could you arrange for Janet to share the truck with the Service Department? You talk to Janet and Wilf Friesen and they agree it could be done.

Now you recalculate the costs of buying just three vehicles (replacements for the Nissan van and the two Chevy pick-ups) and assume a direct sale value of $600 for the Ford half-ton truck (since it won't be traded-in). This time you find the total cost will be slightly less than the budgeted total cost.

With this information in front of you, you prepare your investigation report for Tom Westholm. To it you attach specifications for the three vehicles you recommend you should purchase.