



Whitemarsh
Information Systems Corporation

Information Systems Plan The Bet Your Business Project

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Yea, though I walk through
the valley of aliens, I fear not
for I have by ISP to guide me !



1.0 Why an Information Systems Plan?

- ! Every year, \$300-700 million dollar corporations spend about 5% of their gross income on information systems and their supports. That's from about \$15,000,000 to \$35,000,000!
- ! An information system costs from \$2,000,000 to \$10,000,000
- ! Chief information officers (CIOs) can specify exactly how much money is being spent for hardware, software, and staff

CIOs cannot however state with any degree of certainty:

- ! Why one system is being done this year versus next,
- ! Why it is being done ahead of another, or finally,
- ! Why it is being done at all

The Information Systems Plan¹ is a 3-8 year plan that:

- ! Identifies
- ! Sequences
- ! Accesses
- ! Resource Loads

the set of set of business information systems and databases that support the enterprise.

¹ Much of the credit for the work that led to the creation of the Whitemarsh approach to Information Systems Planning is deserved by Dagmar Bogan and Stan Hopkins.



1.1 Key Information Systems Questions That must Be Answered

- ! What effect will there be on the overall schedule if an information system is purchased versus developed?
- ! At what point does it pay to hire an abnormal quantity of contract staff to advance a schedule?
- ! What is the long term benefit from a 4GL versus a 3GL?
- ! Is it better to generate 3GL than to generate/use a 4GL?
- ! What are the real costs of distributed software development over centralized development?



1.2 Characteristics of a Quality ISP

Timely	The ISP must be timely. An ISP that is created long after it is needed is useless. In almost all cases, it makes no sense to take longer to plan work than to perform the work planned.
Useable	The ISP must be useable. It must be so for all the projects as well as for each project. The ISP should exist in sections that once adopted can be parceled out to project managers and immediately started.
Maintainable	The ISP should be maintainable. New business opportunities, new computers, business mergers, etc. all affect the ISP. The ISP must support quick changes to the estimates, technologies employed, and possibly even to the fundamental project sequences. Once these changes are accomplished, the new ISP should be just a few computer program executions away.
Quality	The ISP must be a quality product. No ISP is ever perfect on the first try. As the ISP is executed, the metrics employed to derive the individual project estimates become refined as a consequence of new hardware technologies, code generators, techniques, or faster working staff. As these changes occur, their effects should be installable into the data that supports ISP computation. In short, the ISP is a living document. It should be updated with every technology event, and certainly no less often than quarterly.
Reproducible	The ISP must be reproducible. That is, when its development activities are performed by any other staff, the ISP produced should essentially be the same. The ISP should not significantly vary by staff assigned.



1.3 Comparison of Four ISP Development Approaches

ISP Method	Staff years	Reliability	Validity	Useability	Maintainability	Modeling support
IBM's Business Systems Plan	20	Low	Low	Low	Low	Low
Martin's Strategic Data Planning	16	Low	Low	Low	Medium	Low
Finklestein's Strategic Management Plan	22	Medium	High	High	Medium	Low
Whitemarsh's Information Systems Plan	2.6	High	High	High	High	High



1.4 Why Whitemarsh's ISP Faster, Better, and Cheaper

- ! The ISP project concentrates on plan development, not IT product development
- ! The ISP is mission-based, which are a-political, strategic, long range, and are easily accomplished.

Versus

- ! IBM, Finklestein and Martin are all function-based analysis, which are "politically charged," stylistic, subject to change, and thus impossible to accomplish.
- ! Since the ISP is a plan; Third through fifth normal form data models are totally unnecessary for a plan.

