

Multimedia/Multilanguage publishing for the 1990s

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AT&T is a global information management and movement enterprise, providing computer and telecommunications products and services all over the world. The global nature of the business, combined with rapidly changing technology call for innovative approaches to publishing and distributing support documentation. AT&T's Document Development Organisation (DDO) is implementing new systems and processes to meet these needs.

Headquartered in Winston-Salem, North Carolina, DDO created over 750,000 original pages of product/service documentation in 1990. While this is already a huge number, the volume of information we produce is increasing at a rate of more than 25 per cent per year! As the volume increases, the demand for information in electronic form also increases rapidly; and more and more of this information must be translated each year to other languages. And it is unlikely that this 'information explosion', or the demand for more efficient methods of distributing and using it, will abate in the near future. In fact, all indications are that current trends will only *accelerate*.

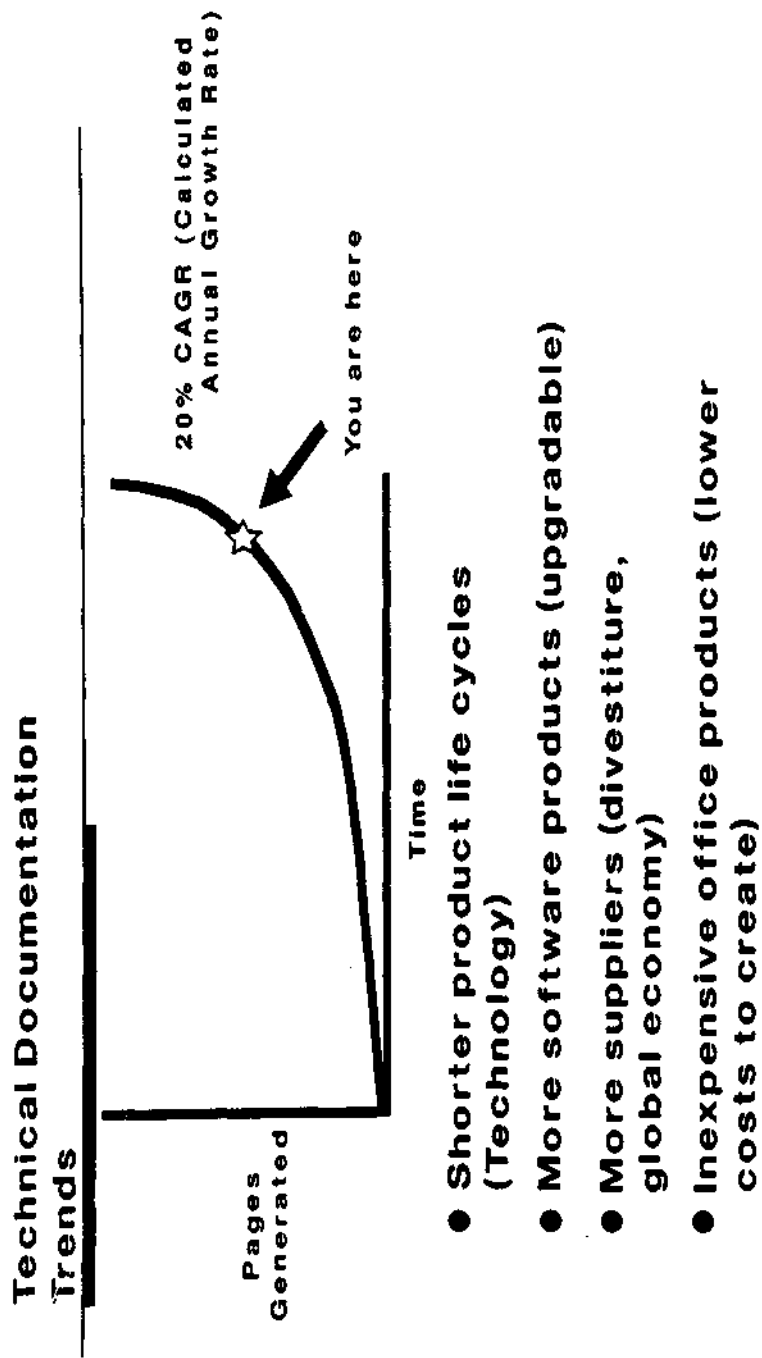


Figure 1.

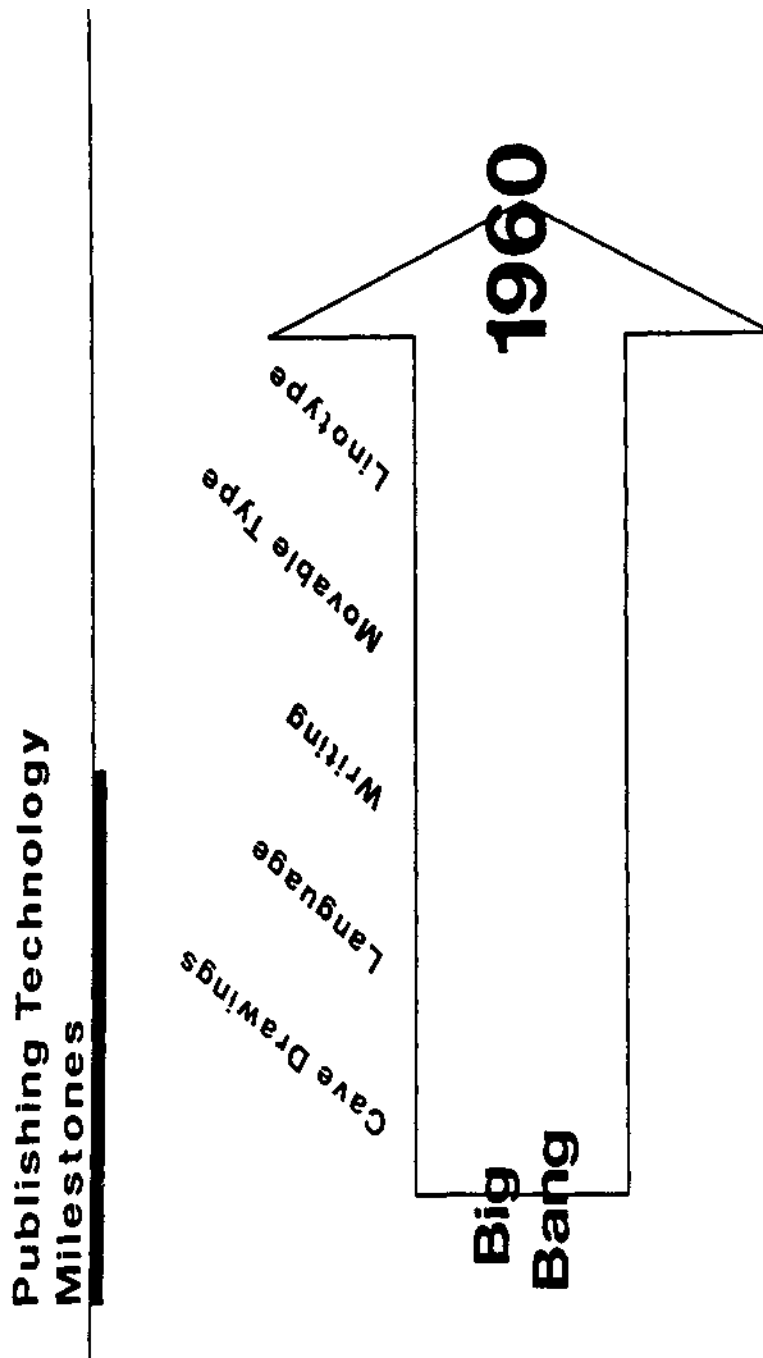


Figure 2.

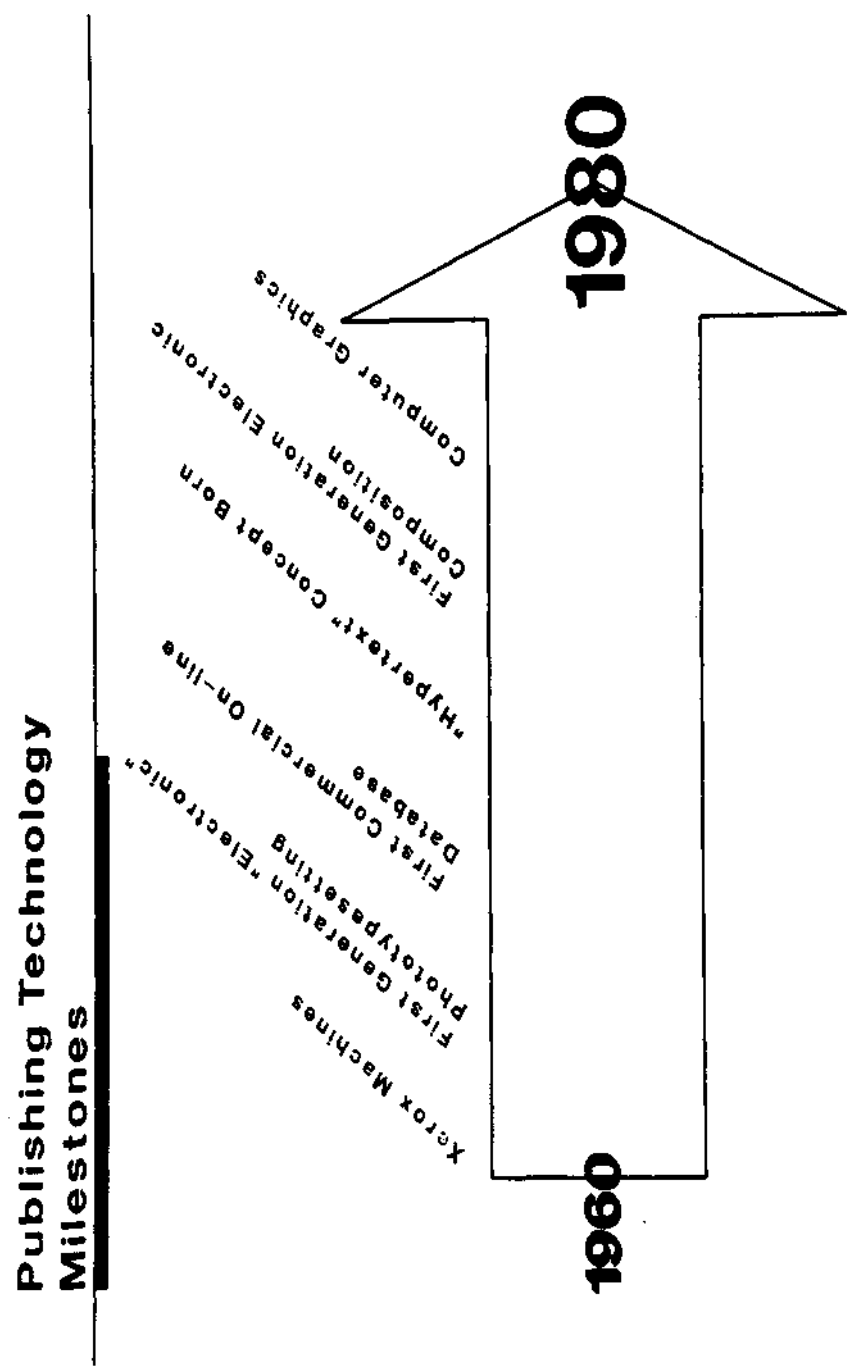


Figure 3.

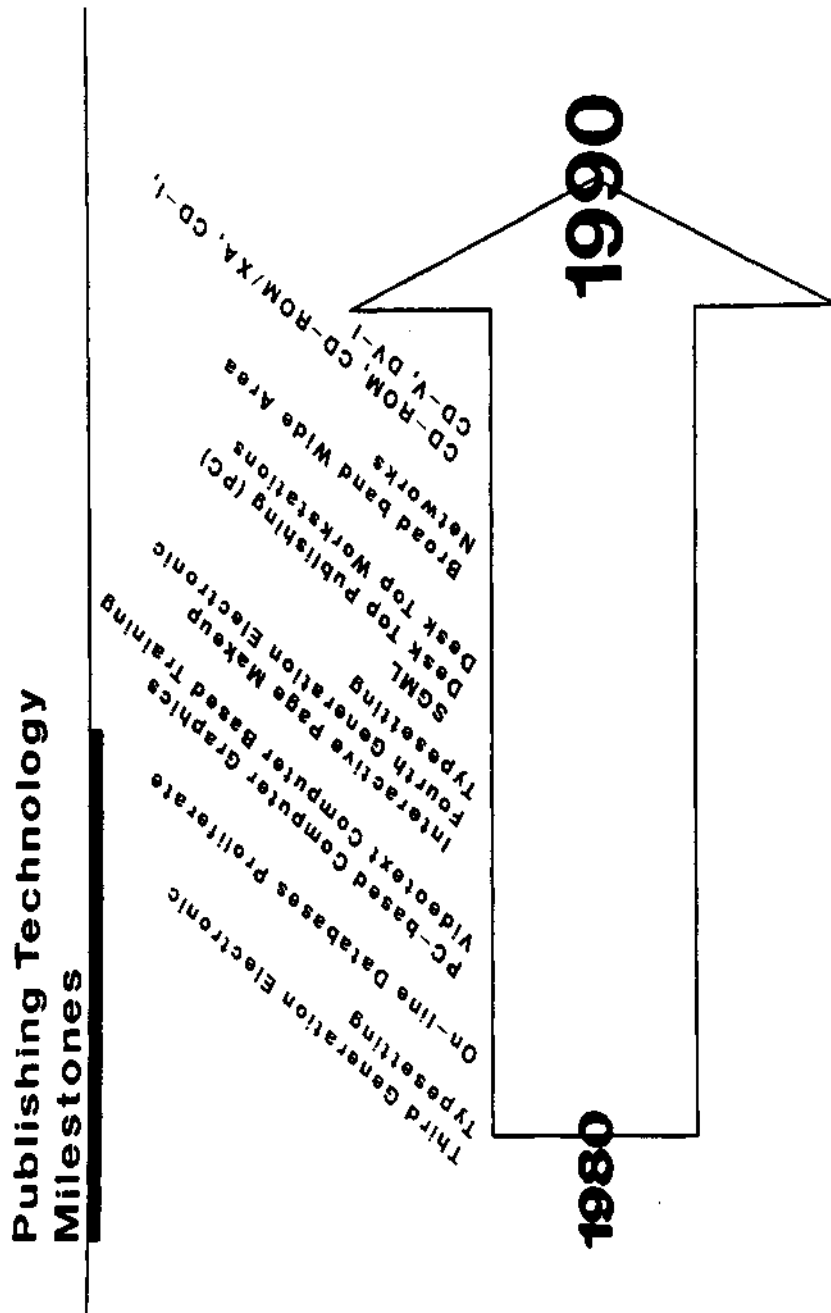


Figure 4.

DDO responded to these demands by implementing an 'object oriented' publishing process. Writers focus on documentation content and structure, using generalised markup, to develop neutral form content models.

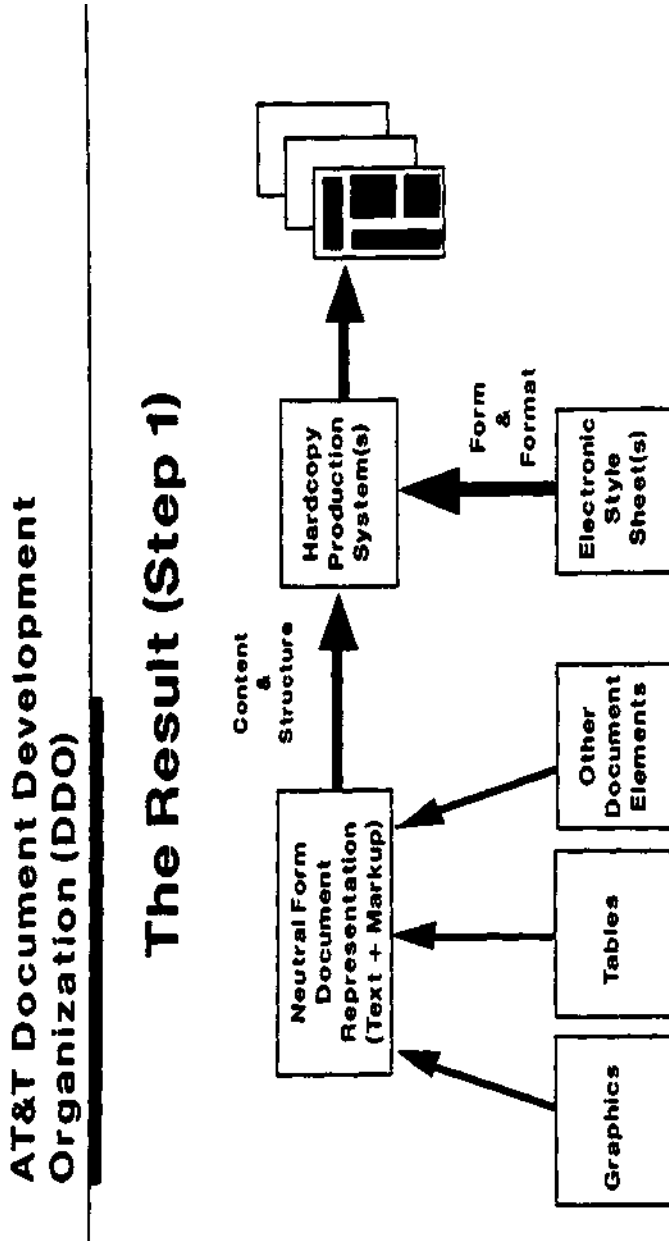


Figure 5.

Form, format and functionality are added to the content in our production systems, via electronic 'style sheets'. Different production systems and

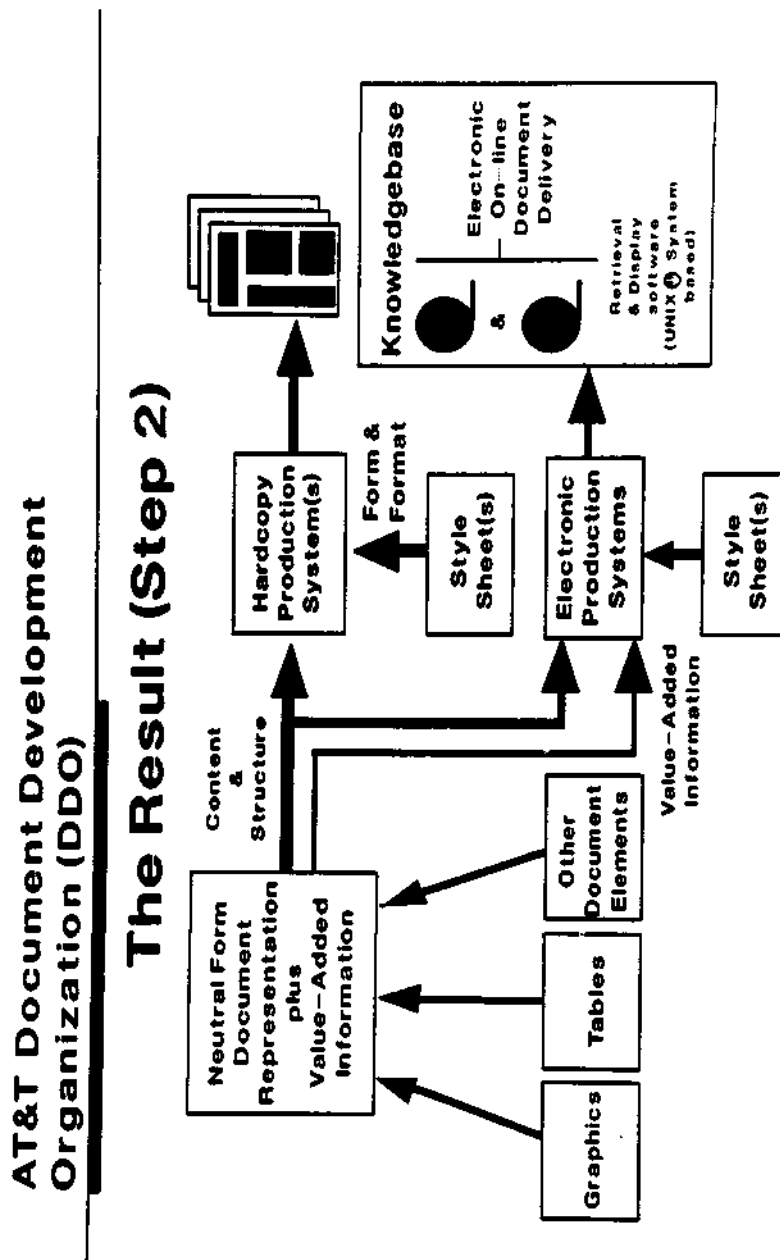


Figure 6.

style sheets produce a variety of traditional paper documents and server-based, PC-based and CD-ROM-based 'electronic documents'.

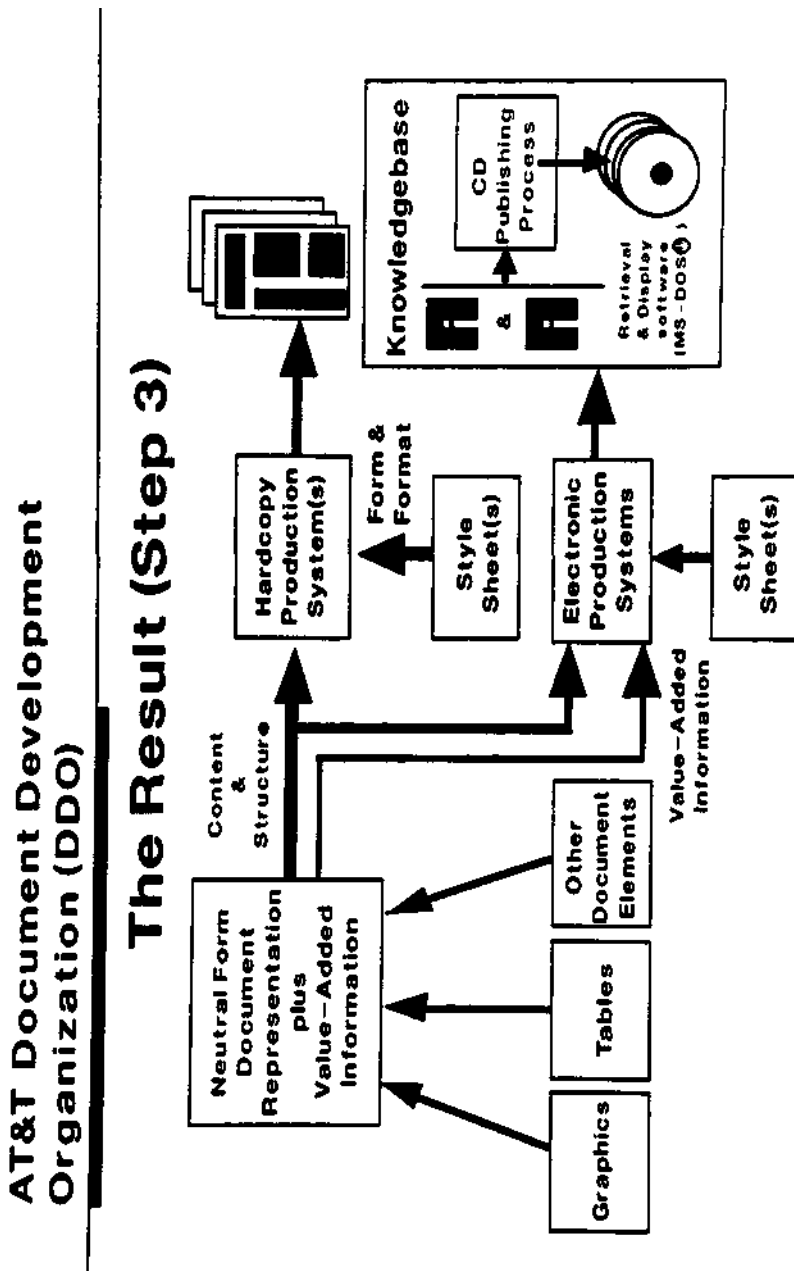


Figure 7.

By translating the neutral form content, and creating multiple language images of the original English documents, we are able to use the same production systems to create equivalent information products in other languages.

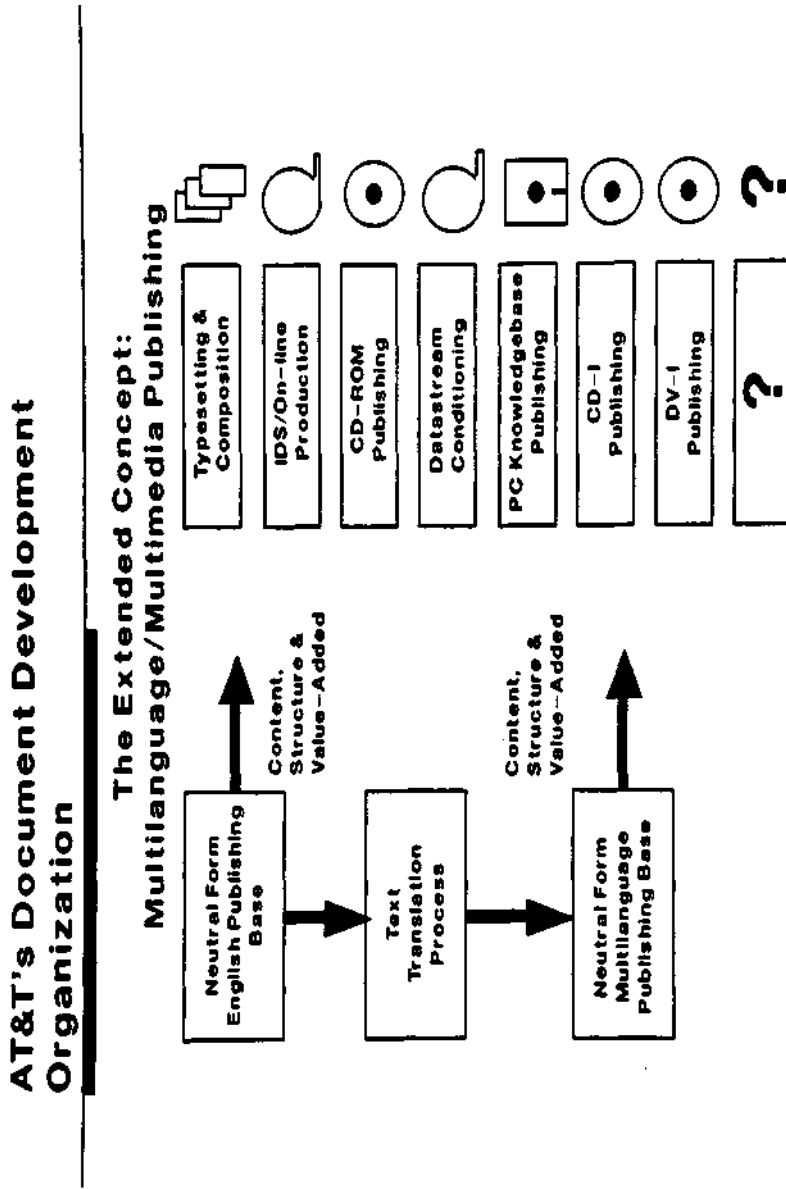


Figure 8.

While it is not quite as easy to do as it is to describe, this approach has provided substantial cost, quality, and turnaround improvements over traditional methods. And our recent addition of Machine Translation (MT) capability to our process has improved throughput and turnaround even further. The integration of a large, mainframe-based MT system, along with the introduction of new or revised procedures, has enabled us to meet 'impossible' translation requirements.

A number of things led to the successful integration of MT into our process, not the least of which was the volume and nature of the information to be translated. Many of our large, complex systems are supported by equally large documentation sets – frequently in excess of 10,000 pages. The large, homogeneous collections of information are ideally suited to MT processes; dictionaries and semantic/grammatical rules can be readily customised to both speed up the process, and reduce the amount of human post-editing required. And, by teaching the MT software to recognise and separate markup from text to be translated, machine translated files are ready to go directly to production.

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Machine Translation Process

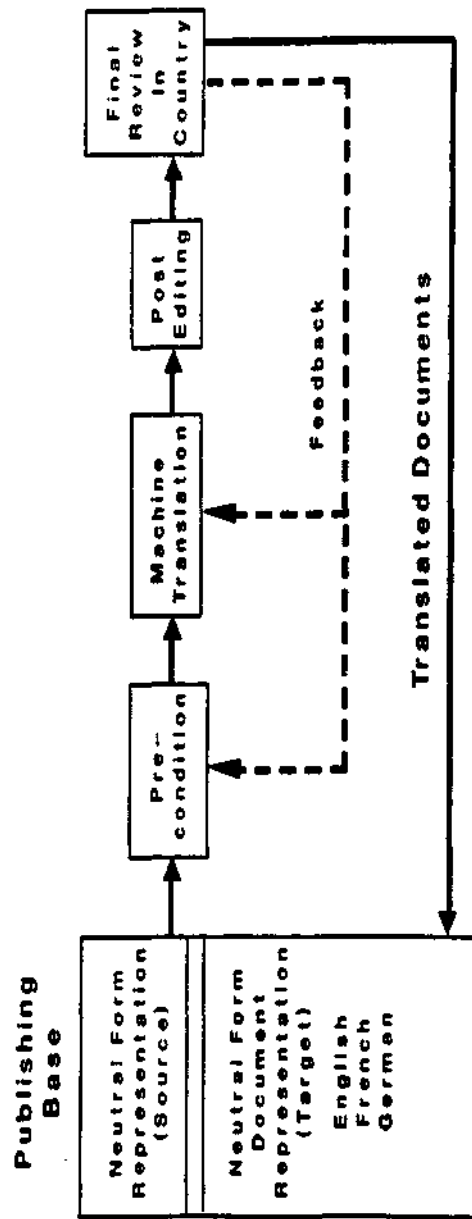


Figure 9.

The process is not fully 'automatic' yet, and will require human interaction for the foreseeable future. It is not a replacement for human translators, but a powerful tool to be used *by human translators*, to multiply their unique skills and capabilities manifold.

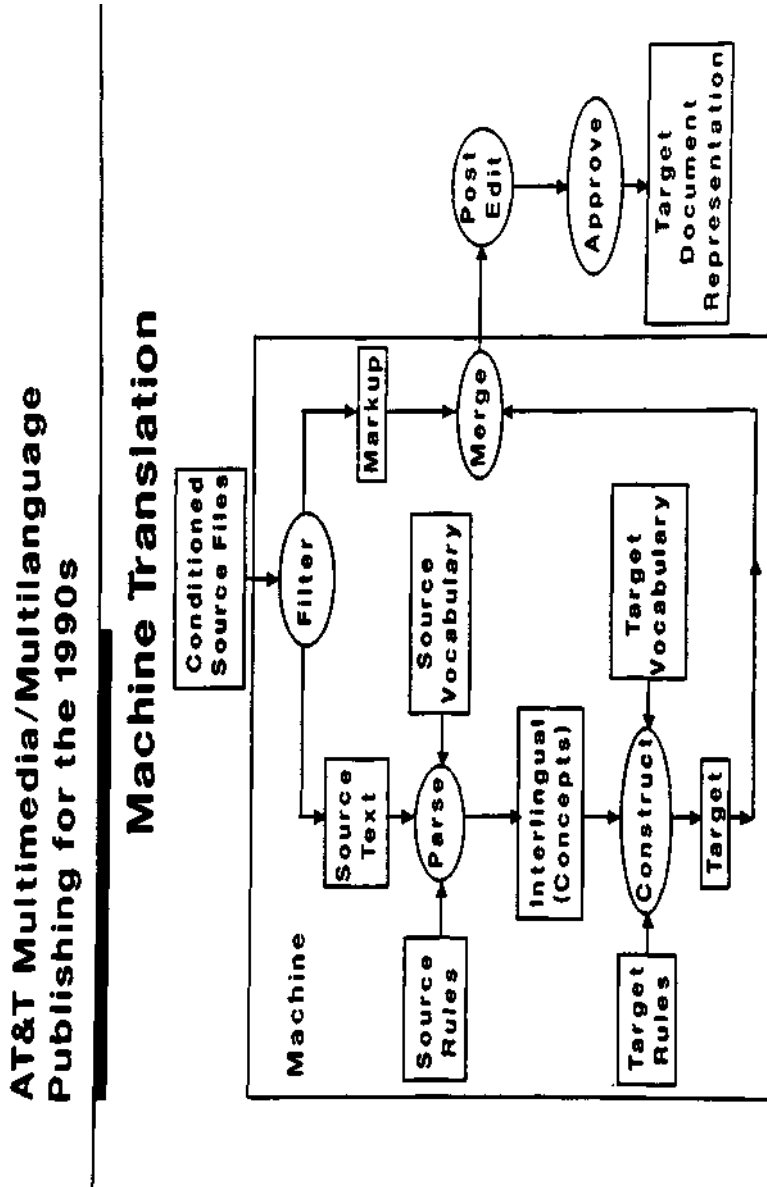


Figure 10.

The 1990s will bring a great deal of change to the publishing world, and to the nature of 'documentation' in general. The presence of the computer will certainly continue to become more pervasive in the creation, production, translation, distribution, and *use* of information. The time to take advantage of emerging technologies is *now!*

AUTHOR

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