

# Untapped Assets: The \$3 Trillion Value of U.S. Enterprise Documents

July 2005

BrightPlanet Corporation

## Executive Summary

Today, in the advanced knowledge economy of the United States, the value of the information contained within documents created each year represents about a third of total gross domestic product, or an amount of about \$3.3 trillion.<sup>1</sup>

Yet our understanding of the value of documents and the means to manage them is abysmal. These failures impact enterprises of all sizes from the standpoints of revenues, profitability and reputation. Continued national productivity growth – and thus the wealth of all citizens – depends critically on understanding and managing these document values.

### Key Findings

Some 25% of the annual trillions of dollars spent on document creation lend themselves to actionable improvements:

ALL U.S. FIRMS	\$ Million	%
Cost to Create Documents	\$3,261,091	
Benefits to Finding Missed or Overlooked Documents	\$489,164	63%
Benefits to Improved Document Access	\$81,360	10%
Benefits of Re-finding Web Documents	\$32,967	4%
Benefits of Proposal Preparation and Wins	\$6,798	1%
Benefits of Paperwork Requirements and Compliance	\$119,868	15%
Benefits of Reducing Unauthorized Disclosures	\$51,187	7%
<b>Total Annual Benefits</b>	<b>\$781,314</b>	<b>100%</b>
PER LARGE FIRM	\$ Million	
Cost to Create Documents	\$955.6	
Benefits to Finding Missed or Overlooked Documents	\$143.3	
Benefits to Improving Document Access	\$23.8	
Benefits of Re-finding Web Documents	\$9.7	
Benefits of Proposal Preparation and Wins	\$2.0	
Benefits of Paperwork Requirements and Compliance	\$35.1	
Benefits of Reducing Unauthorized Disclosures	\$15.0	
<b>Total Annual Benefits</b>	<b>\$229.0</b>	

**Table 1. Mid-range Estimates for the Annual Value of Documents, U.S. Firms, 2002**

<sup>1</sup> This summary is extracted from, M.K. Bergman, "Untapped Assets: The \$3 Trillion Value of U.S. Enterprise Documents," *BrightPlanet Corporation White Paper*, July 2005, 42 pp. All 80 references, 150 citations and calculations are fully documented in the full paper. See <http://www.brightplanet.com/technology/whitepapers.asp>.

Corporate data doubles every six to eight months, 85% of which are documents. At least 10% of an enterprise's information changes on a monthly basis. Year-on-year office document growth rates are on the order of 22%. There are perhaps on the order of 10 billion documents created annually in the U.S. Older documents of archival value add substantially to this intellectual storehouse.

The total benefit from improved document access and use to the U.S economy is on the order of \$800 billion annually, or about 8% of GDP. For the 1,000 largest U.S. firms, benefits from these improvements can approach nearly \$250 million annually per firm. About three-quarters of these benefits arise from *not* re-creating the intellectual capital already invested in prior document creation. About one-quarter of the benefits are due to reduced regulatory non-compliance or paperwork, or better competitiveness in obtaining solicited grants and contracts.

Indeed, even these figures likely severely underestimate the benefits to enterprises from an improved leverage of document assets. It has always been the case that the best and most successful companies have been able to make better advantage of their intellectual assets than their competitors. The competitiveness advantage from better document access and use alone may exceed the huge benefits in the table above.

### ***Prior Studies Fragmented, Incomplete***

Only three large document studies – from Coopers & Lybrand, Xerox and A.T. Kearney – have been conducted in the past ten years regarding the use and importance of documents within enterprises, and then solely from the standpoint of executive perceptions.

According to the studies from Coopers & Lybrand and Xerox:

- Ninety percent of corporate memory exists on paper
- Ninety percent of the papers handled each day are merely shuffled
- Professionals spend 5-15 percent of their time reading information, but up to 50 percent looking for it
- On average, 19 copies are made of each paper document
- 82% believe that documents were crucial to the successful operation of their organizations
- 70% claim that poor document processes impact their operational agility
- While 83%, 78% and 76% consider faxes, email and electronic files as documents, respectively, only 48% and 46% categorize web pages and multimedia content as such.

But, if defining what constitutes a document is hard, identifying the costs associated with all the document activities is almost impossible for many

organizations. The A.T. Kearney study estimated that workforce inefficiencies related to content publishing cost organizations globally about \$750 billion. The study further estimated that knowledge workers waste between 15% to 25% of their time in non-productive document activities. Other studies report that typically only 32% of employees in knowledge organizations have access to good information about technical developments relevant to their work, and 79% claim they have inadequate information about what their competitors are doing.

### ***Documents: Why So Overlooked?***

How many documents does your organization create each year? What effort does this represent in terms of total staffing costs? What does it cost to create a ‘typical’ document? Of documents created, how much of the value in them is readily sharable throughout your organization? How long do you need to keep valuable documents and how can you access them? How much existing document content is re-created simply because prior work cannot be found? When prior information is missed, what do these prior investments in documents represent in terms of loss of market share, revenue or reputation? Indeed, what does the term, “document” represent in your organization’s context?

If you have difficulty answering these questions, you are not alone. Depending on the survey, from 90% to 97% of enterprises cannot answer these questions – in whole or in part. The purpose of BrightPlanet’s white paper is to provide the first comprehensive assessment ever of these document values.

Enterprises and the analyst community have historically overlooked the impact of *document creation* as opposed to *document handling*. Document creation is about 2-3 times more important – from an embedded cost standpoint – than document handling. All aspects of document creation, and later access and use, assume a much greater role in the overall economics of enterprises than have been realized previously.

Put your index finger one inch from your nose. That is how close – and unfocused – document importance is to an organization. Documents are the salient reality of a knowledge economy, but like your finger, documents are often too close, ubiquitous and commonplace to appreciate.

How do your employees earn their livings? Writing proposals? Marketing or selling? Evaluating competitors or opportunities? Persuading? Analyzing? Communicating? Teaching? Of course, in some sectors, many make their living from growing things or making things. These are essential jobs – indeed, until the last few decades were the predominant drivers of economies – but are now being supplanted in advanced economies by knowledge work. Perhaps up to 35% of all company employees in the U.S. can be classified as knowledge workers.

And knowledge work means documents. The fact is that knowledge is produced and communicated through the written word. When we search, when we write, when we persuade, we may often do so verbally but make it persistent through the written word.

The lack of a compelling and demonstrable common understanding of the importance of documents is in itself a major factor limiting available productivity benefits. There is an old Chinese saying that roughly translated is “what cannot be measured, cannot be improved.” Many corporate executives may believe this to be the case for document creation and productivity, but, as BrightPlanet’s paper shows, in fact many of these document values can be measured.

### ***Documents: The Next Generation of Data Warehousing?***

Documents – that is, *unstructured* and *semi-structured* data – are now at the point where structured data was at 15 years ago. At that time, companies realized that consolidating information from multiple numeric databases would be a key source of competitive advantage. That realization led to the development and growth of the data warehousing or business intelligence markets, now representing about \$3.9 billion in annual software sales.

Search and enterprise content management software today only represents a fraction of that amount – perhaps on the order of \$500 million annually. The enterprise content integration software market is fragmented and confused, with only a few established companies providing partial solutions. Content integration is still a small market with annual revenues of less than \$50 million worldwide. Vendor offerings fail to satisfy customer needs because of a lack of functionality and a lack of scalability to enterprise volumes. Sales in the market remain distinctly lower than those projected by industry analysts, even as the magnitude of “information overload” continues to grow at a dramatic rate.

But given that intellectual content in documents represents three to four times the amount in numeric structured data, it is clear that document software capabilities are not being well utilized, reaching only a small fraction of their market potential.

The state of information regarding the value and cost of documents is extremely poor. Lack of defensible and vetted estimates for this information undercuts the ability to properly estimate the intellectual assets tied up in documents or the impacts of overlooked or misused documents. As understanding of these values increases, companies of all sizes will be able to justify investments in better document access and use. Document integration is about to achieve the phenomenal growth of the data warehousing software market of the early 1990s.

### ***Basis for the Study***

BrightPlanet's paper draws upon about 80 different data sources, many fragmented. To bracket uncertainties, most estimates are provided in low, medium and high estimates. The study should be viewed as preliminary, but strongly indicative of the value of documents. Further research and data collection will surely refine BrightPlanet's estimates. Clearly, though, by any measure, the value of documents to the enterprise is significant and huge, and should not continue to be overlooked.