

WHITE PAPER

Gaining Business Value and ROI with LANDesk Software: Automated Change and Configuration Management

Sponsored by: LANDesk

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INTRODUCTION

IT organizations must overcome enormous challenges in order to deliver reliable, cost-effective services to business units and end users alike — even as budgets are squeezed and the IT environment rapidly increases in scale and complexity. Processes for provisioning, configuring, patching, and maintaining desktops, servers, and an ever-increasing variety of mobile client devices are often based on time-consuming and expensive manual procedures, which don't scale. IT executives need system management solutions that automate manual processes to provision and maintain new desktops, mobile devices, and servers. Automated and cross-platform/device solutions are the key to helping IT organizations control costs and deliver higher-value services and functional capabilities to business organizations and end users. Without automation, IT lacks the scalability needed to manage the overall environment quickly and efficiently as well as deliver new IT services to the business user.

EXECUTIVE OVERVIEW

Automation provides business value by increasing staff productivity and efficiency, increasing the availability and utilization of infrastructure resources, and reducing the cost and difficulty of managing complexity. This automation has traditionally been focused on desktops, notebooks, and servers. The explosion of mobile devices, in a user-centric world, requires support for Windows, Mac (both Mac OS and iOS), Android, BlackBerry, and other platforms. LANDesk provides automated software solutions for systems life-cycle management, IT service management, IT asset management, and endpoint security management. In order to help quantify the benefits of using LANDesk solutions, IDC has conducted an ROI analysis of using LANDesk products to automate IT change and configuration management processes. For this study, IDC conducted in-depth structured interviews with IT managers and professionals from 15 companies headquartered in Asia/Pacific, EMEA, and North America. Data gathered from these interviews was analyzed using IDC's standard ROI methodology to gain a quantitative assessment of the benefits users have been able to achieve by using LANDesk products.

KEY FINDINGS

IDC found that the users interviewed in this study were able to achieve impressive financial benefits from deploying LANDesk products. As shown in Table 1, the interviewed companies on average were able to achieve a strong three-year return on investment (ROI) of 698% for their deployed LANDesk solutions — a nearly sevenfold return. The average payback period to recover the initial investment averaged a short 5.1 months.

TABLE 1

LANDesk Three-Year ROI Analysis per 100 Users

	Value
Benefits	\$76,154.00
Investment	\$9,537.00
Net present value	\$66,617.00
ROI = NPV/investment	698%
Payback in months	5.10
Discount factor	12%

Source: IDC, October 2010

Financial benefits contributing to the positive ROI results found in this study were derived from the following areas:

- ☒ **IT staff productivity increase.** Optimizing IT staff activities through automation reduced IT staff time spent "keeping the lights on" by 41%, freeing up valuable staff resources for business-related initiatives.
- ☒ **User productivity increase.** User downtime caused by system outages, virus attacks, security intrusions, and change and configuration activities was reduced by 49%.
- ☒ **IT cost reduction.** Optimizing IT operations reduced costs in multiple areas, including infrastructure, outsourced services, management software, and IT travel.

Over the three-year analysis period, the IT organizations in this study experienced total annual benefits of \$32,022 per 100 users in these three areas.

SITUATION OVERVIEW

Keeping users productive is one of the main functions of the IT organization. PC clients, servers, systems, and applications are continually updated, patched, and migrated, requiring hundreds or thousands of changes to be applied in the IT environment on a daily or weekly basis. Automating the necessary change management functions, including asset discovery and deployment, is critical to effective management of IT systems. IT organizations need to ensure that the right software assets get to the right people at the lowest cost to the business.

In IDC's interviews with LANDesk customers, the IT executives and managers reported challenges they face when managing the diversity of desktops, laptops, and servers within their IT organizations:

- ☒ **Software asset and license management.** IT executives reported problems tracking and managing software licenses through existing manual processes.
- ☒ **Automation and creation of easy-to-consume services for the business.** IT executives need to run lean within IT staff at times and need solutions that allow quick, accurate provisioning of new PCs to new employees as those employees are hired.
- ☒ **Self-service, automated provisioning.** IT managers noted a general need to allow users the capability to download applications on their desktop that had been approved for use by IT. IT needed a way to give users this capability without being overwhelmed with requests.
- ☒ **Desktop management.** The day-to-day need for managing and updating servers and PCs was a challenge with manual processes, and IT executives faced problems with updating PC and servers and ensuring their good working order.
- ☒ **OS deployment.** Being able to deploy a new operating system to a PC is a critical function for any automated solution, especially in an environment expected to migrate from Windows XP to Windows 7.
- ☒ **Secure endpoint management through centralization.** With multiple locations to manage and support, IT managers need to centralize server and PC management to control costs, lower overhead, and ensure quick problem identification and resolution.
- ☒ **Automated patch management.** Both the operating environment and the applications that make users productive require periodic patching over the working life of the server or PC. IT needs a way to patch all machines and to verify that patches are in place.

These challenges must be met with a mix of changes to the processes that IT executes to update PCs and servers and changes to the technology used in executing the changes.

LANDESK SOFTWARE

LANDesk Software was established as an independent business in 2002. The company was created by a spin-out from Intel Corporation of the division responsible for development, marketing, and support of the LANDesk Management Suite. To this day, LANDesk remains intact as a software business and is headquartered in Utah.

LANDesk's systems management strategy is to provide an integrated, easy-to-use software solution for the midsize to large enterprise. LANDesk's flagship product, the Desktop Management Suite, has been continually updated and improved, adding new functionality such as OS deployment and profile migration, security management, software license monitoring, and patch management across a wide range of platforms and users — PCs, Macs, mobile devices, and servers. Additionally, the company acquired Touchpaper Software for a service desk management capability and New Road Software for workflow and other critical system management functional requirements.

LANDesk's customer base is diverse. Sixty percent of LANDesk's business comes from customers with between 1,500 and 10,000 desktops under management, and 30% of its business from companies with 10,000 to more than 100,000 end users managed. According to the company, LANDesk solutions can support up to 10,000 users per core server and over 250,000 users in its rollup database. Of course, individual IT departments can adjust the number of devices supported by any one server, depending on company network architecture, system management tasks to be performed, and size of the operating system to be migrated.

Overall, the integrated suite approach that LANDesk is taking to manage its solutions offers significant benefits to IT managers, administrators, and executives:

- ☒ **For IT executives.** The suite approach offers a single throat to choke as well as one-stop shopping for a solution, without the hassle of going to one vendor for one piece and negotiating a deal and then going to another vendor to negotiate another deal.
- ☒ **For IT managers and administrators.** The suite approach ensures that the products for asset discovery, inventory, software deployment, remote control, and workflow all work together seamlessly in a single console. This allows IT managers and administrators to create and deploy updates quickly without much trouble.

BUSINESS VALUE ROI STUDY

Study Demographics

To quantify benefits associated with an IT service management–focused solution, as well as to determine how a specific vendor solution worked for customers, IDC conducted a study of LANDesk customers to determine specific business benefits realized by those customers. IDC interviewed senior IT managers at 15 organizations headquartered in Asia/Pacific, EMEA, and North America. LANDesk customers represent not only a wide range of regions but also multiple industries, including healthcare, manufacturing, technology, finance, utilities, religious, and education.

These organizations had an average of 12,925 employees and 11,774 IT users (91% of employees). Table 2 displays the demographics summary.

TABLE 2	
Demographics	
	Value
Average number of employees	12,925
Average number of users	11,774
Users per IT staff	61
Average number of PCs	13,882
Percentage migrating from another tool	93
Geographies	North America, EMEA, Asia/Pacific

Source: IDC, October 2010

Over the past several years, IDC has assessed the impact of the LANDesk suite on varied organizations. Naturally, each group is different, and as a result, the benefits change. In this study, there were two significant differences:

1. This study was international, including organizations from Asia/Pacific, North America, and EMEA; the results showed that many of the reasons for implementing LANDesk cut across regional boundaries — simple, easy to install, and easy to use but also had better software compliance and distribution and finally the ability to manage remotely.
2. This was a very mature group in terms of IT management practices, as evidenced by the fact that 14 of 15 companies were replacing other management tools with LANDesk rather than having LANDesk as their first management tool. This meant that these companies already had pretty good management tools but either were not satisfied with some aspect or needed additional functionality. Several were attracted to the integrated nature of LANDesk. As one company ably put it, "One of the key components about LANDesk is what they call, 'distributed multicasting.' That was one of the key differentiators. We had several other products that we were using to patch machines, remotely manage machines and asset management, for example. LANDesk allowed us to consolidate all of that functionality into one product. Other tools were cheaper individually, but their functionality didn't add up to the functionality of LANDesk."

BENEFITS ANALYSIS

Benefits

In all cases, the organizations participating in this study were able to quantify the following benefits from deploying LANDesk management solutions:

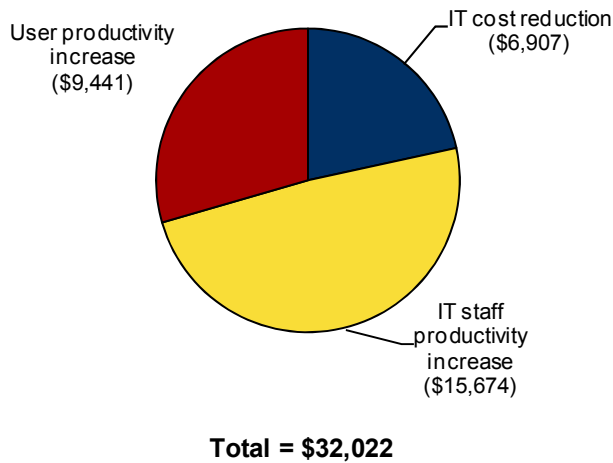
- ☒ **IT staff productivity increase.** Optimizing IT staff activities through automation reduced IT staff time spent keeping the lights on by average of 41%, freeing up valuable staff resources for more business-related initiatives. The result was an annual savings of \$15,674 per 100 users.
- ☒ **User productivity increase.** User downtime caused by system outages, virus attacks, security intrusions, and change and configuration activities was reduced by 49%. The result was an annual savings of \$9,441 per 100 users.
- ☒ **IT cost reduction.** Optimizing IT operations reduced costs in multiple areas, including infrastructure, outsourced services, management software, and IT travel. The result was an annual savings of \$6,907 per 100 users.

Total benefits were \$32,022 per 100 users annually, as shown in Figure 1.

Note: In prior LANDesk studies, we have included the benefit from increased revenue. In the current study, the companies participating were not using LANDesk in support of revenue-generating activities. This is because these companies did not use their IT resources to generate revenue.

FIGURE 1

Annual Benefits per 100 Users



Source: IDC, October 2010

IT Staff Productivity

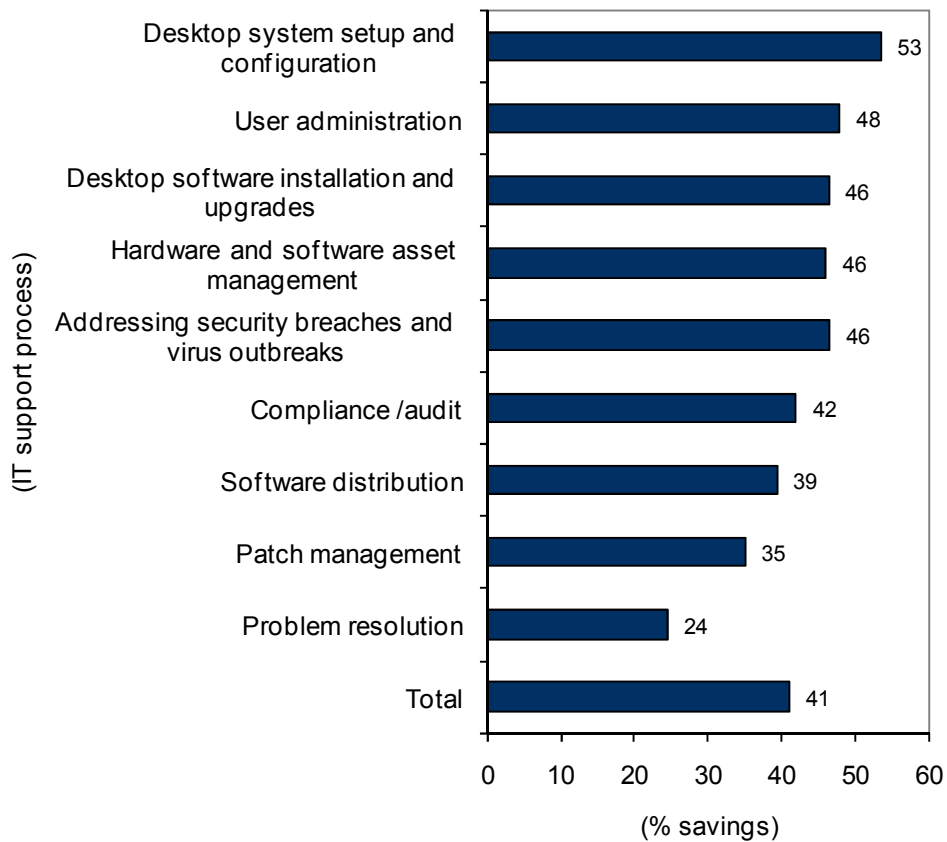
Automating Client and Server Management

The first major area of increased IT staff productivity came from automating client and server management. The LANDesk solution provides a complete suite of products to enable remote automated support across most IT support functions related to client and server management. This remote support starts with desktop system setup and configuration. Companies in the study were able to reduce the time to set up and configure each desktop from 2.2 hours to 1.0 hours and the time to build and package each image from 8 hours to 30 minutes. The IT department can push applications out to new parts of the organization without actually visiting the site, reducing software distribution time by 39%.

Time requirements for patch management, asset management, and user administration are reduced through automation as well. With an integrated platform, the IT staff can see the whole environment, so addressing security breaches and virus outbreaks and other problem resolution functions is easier and quicker. In addition, preparing for compliance audits requires less effort. Figure 2 shows a subset of the functions contributing to increased IT staff productivity.

FIGURE 2

Reduction in IT Staff Time



Source: IDC, October 2010

Overall, the companies in this study were able to reduce the time required for the functions addressed in Figure 2 by 41% on average, saving \$8,576 per 100 users per year.

Help Desk Optimization

The second major area of increased IT staff productivity came from optimizing help desk operations. Automating the setup, configuration, security, and administration of help desk functions improves the quality of IT services and reduces the costs of providing help desk support. Automation reduces errors, in turn reducing help desk calls by 20%. By reducing the number of problems, the companies in the study were able to more quickly identify and resolve individual incidents. Level 1 responders are now able to resolve 78% of problems, while before they could address only 48% of calls. For problems beyond level 1 response, MTTR was reduced by 50%. Overall, more efficient help desk operations resulted in annual savings of \$3,520 per 100 users (see Table 3).

TABLE 3

Help Desk Optimization

	Before	After	Savings	% Reduction
Average calls per user per year	15.56	11.23	4.32	28
Response time in hours	5.88	2.94	2.94	50
First level resolution (%)	48	78	30	63
Annual help desk labor hours per year	5.37	1.08	4.29	80

Source: IDC, October 2010

Avoidance of Additional Hiring

The third major benefit of increased IT staff productivity came from avoidance of hiring additional IT staff. By optimizing IT operations, the organizations in the study were able to increase the range of their IT services at a higher level of quality in growing environments, without adding staff. On average, companies were able to avoid increasing staff by 12%, which saved each company \$3,578 per 100 users annually.

In summary, improvements in IT staff productivity came from three major sources:

- Automation, which saved \$8,576 annually per 100 users
- Improved help desk operations, which saved \$3,520 annually per 100 users
- Avoidance of hiring, which saved \$3,578 annually per 100 users

Together, improvements in IT staff productivity from these three sources saved a total of \$15,674 annually per 100 users, as shown in Figure 1. This was the highest value benefit experienced by the organizations interviewed for this study.

User Productivity

The second major benefit from deploying LANDesk solutions came from increased user productivity. Optimizing the IT services directly impacts user productivity by reducing the impediments to the use of key business applications. The most significant impediments are system and network outages and security intrusions and virus attacks. Not only is the user workflow disrupted, but chronic disruptions lead to lower levels of utilization as users become wary of using the applications. LANDesk helped reduce system downtime issues by 75%. Patch management and security management contributed to the improvement in downtime by keeping the security applications environment up to date. In one extreme case, a financial services provider suffered more than 30 virus attacks per year, costing each user over 170 hours of lost time. With LANDesk, the company was able to reduce the loss by 95%.

We have already discussed the reduction in IT labor resulting in more efficient help desk operations. Users also enjoy this benefit. On average, each user was wasting 13 hours annually calling the help desk to resolve performance or compatibility issues. LANDesk was able to improve support so that users gained back about five hours annually (see Table 4).

TABLE 4

User Productivity				
	Before	After	Savings	% Reduction
Security intrusion hours per year	6.66	6.00	0.66	10
Virus attacks per year	10.93	5.00	5.93	54
Annual user savings	3.14	2.05	1.09	35
Downtime hours per year	16.40	4.10	12.30	75
Help desk hours per year	13.07	8.00	5.07	39
Total hours per user per year	39	20	19	49
Average loaded salary	\$63,744			
Productivity loss for help desk/self-help	15%			
Impact of downtime incident on productivity	21%			
Total user productivity loss	\$198.93	\$102.09	\$96.84	49

Source: IDC, October 2010

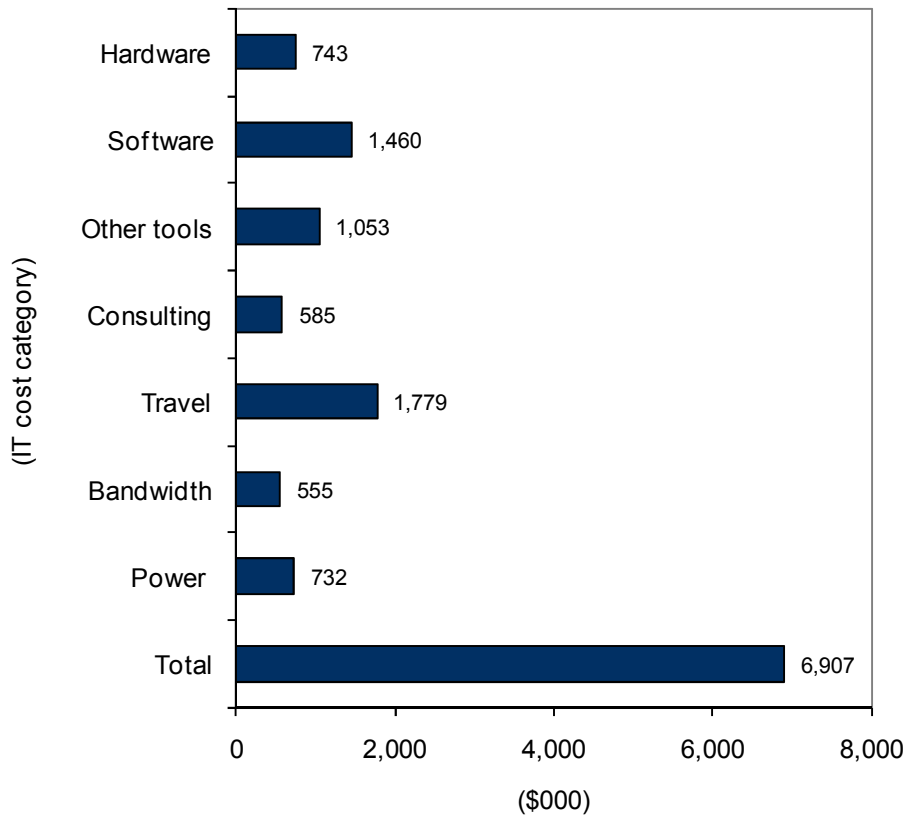
Overall, lost user productivity was reduced by 49% and each IT user gained an additional 19 hours of productive time per year. The annual total user productivity benefit was \$9,441 per 100 users, as shown in Figure 1.

IT Cost Reduction

The third area of benefits is IT cost reduction. These benefits come from improving IT operations and optimizing the IT infrastructure. Savings are achieved by reducing operational costs such as power, travel, and consulting services and infrastructure costs such as hardware. Figure 3 illustrates the categories and values of IT cost reduction achieved using LANDesk solutions. The savings averaged a total of \$6,907 per 100 users.

FIGURE 3

Annual Cost Savings per 100 Users



Source: IDC, October 2010

One of the primary reasons that organizations in this study selected LANDesk asset management solutions was to improve inventory management and avoid unnecessary purchases. In this way, companies in the study were able to reduce their server hardware purchases by as much as 50%.

Similarly, savings resulted from managing software licenses. Because many companies do not track licenses, the number of software licenses often goes unchecked. With LANDesk, when a new user requires access to an application, the IT organization can identify unused licenses in the company and reallocate the license. Conversely, by monitoring usage, companies were able to drop unused licenses. One organization interviewed for this study was able to renegotiate its enterprise license and avoid \$900,000 (\$90,000 per 100 users) in license fees. In addition to reducing waste in hardware and software purchasing, the organizations in this study were able to eliminate the hardware and software associated with the management tools replaced by LANDesk.

The cost of power consumption has become one of the hot buttons for IT management. LANDesk's power management module directly addresses the power issue. By being able to power down during periods of nonuse, the customers in the study were able to reduce their desktop power consumption by 5% to 30%. LANDesk's multicasting capability, so critical for software distribution, requires fewer network resources, using about 10% of the bandwidth used for unicasting. This efficiency is especially important with organizations with a high volume of remote users. As one interviewee recalled, "Because of all of the remote access ... our network people love us because we don't saturate the lines. We never have to go to them to ask them to configure the routers to accommodate us."

Other hard costs directly related to improved IT staff operations were reduced as well. As the staffs have become more efficient, the companies are able to rely less on contractor support, reducing third-party support fees.

Nearly all the organizations realized reduced travel costs via LANDesk remote management. Savings came from avoiding on average 800 trips a year, which led to reductions in travel reimbursements, fuel costs, and vehicles. One customer who did not experience travel reductions saved \$60,000 (\$600 per 100 users) annually in shipping costs.

The results from the interviews show that on average, a company can expect \$6,907 in annual cost reduction benefits per 100 users, as shown in Figure 3.

ROI ANALYSIS

IDC uses a three-step methodology for conducting ROI analysis:

- ☒ **Gather quantitative benefit information during the interviews using a before-and-after assessment.** In this study, the benefits included IT staff productivity increase, user productivity increase, and IT cost reduction (refer back to Figure 1).
- ☒ **Create a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond just the solution's hardware and software. IT departments spent staff time installing and configuring the new solution, removing old equipment and/or software, and then maintaining the new solution over three years. Ancillary costs directly related to the solution, such as user input to planning, outsourced installation, configuration or maintenance costs, and IT staff or user training, are also included in the analysis.

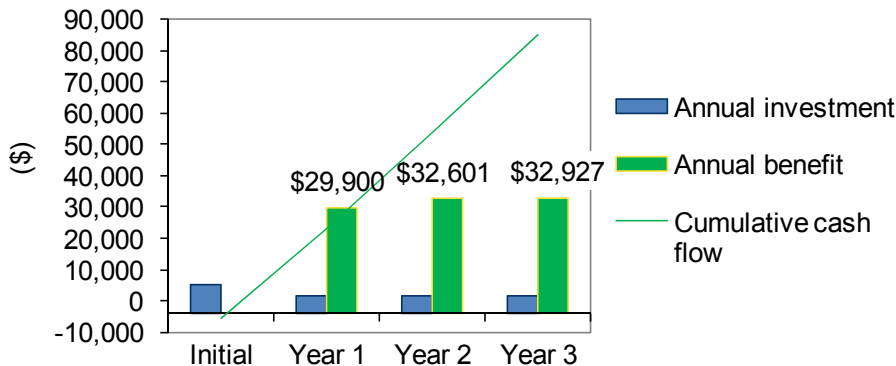
- ☒ **Calculate the ROI and payback period by conducting a depreciated cash flow analysis of the benefits and investments over a three-year period.** IDC uses a 12% discount rate in the ROI analysis to account for risk and to ensure a conservative analysis.

The three-year ROI analysis shows that on average, the companies in this study spent \$9,537 per 100 users deploying and maintaining LANDesk and received \$76,154 per 100 users in benefits for a net present value (NPV) of \$66,167. The companies saw a payback period of 5.1 months after deployment and an ROI of 698% (refer back to Table 1).

Figure 4 shows the annual benefits, investments, and cash flow over the course of the analysis. As with most IT solutions, the initial costs are significant, in this case accounting for 51% of the total investment over the three years. The annual investments remain relatively flat over time, composed of the annual licensing fees and labor dedicated to managing LANDesk. IDC does not recognize benefits until after the solution is deployed and the first-year benefits are prorated over the months after deployment. Annual benefits increase after the deployment. In the third year of use, cumulative cash flow reaches \$84,845 per 100 users.

FIGURE 4

Cash Flow Analysis per 100 Users



Source: IDC, October 2010

CHALLENGES/OPPORTUNITIES

LANDesk faces challenges as it moves forward in the marketplace, including the following:

- ☒ **Sale from Emerson/Avocent.** This marks the second time that LANDesk will have been spun out from a larger company, LANDesk needs to assure customers that development and maintenance of their solutions will continue as usual. IDC expects that LANDesk will continue its marketing and development presence, along with maintaining other activities such as the user group meetings. This will reassure customers and prospects that business is being conducted as usual at LANDesk.

- ☒ **LANDesk is not broadly known outside system management or in very large enterprises.** LANDesk's ability to scale to large enterprises with more than 100,000 endpoints under management means that the company can offer a solution to large enterprises. This process would be aided by the development of a set of marketing and sales channel partners that can market to large IT organizations and that can also support LANDesk's vision and technology by standardizing on it for their own use and for use by customers.

Key LANDesk opportunities include

- ☒ **Mobility.** Mobile devices such as BlackBerrys, iPads, iPhones, other smartphones, and other consumer-led devices are continually being brought into the enterprise. The explosion in the use of these devices in the enterprise is forcing IT to look to other ways to ensure that corporate data continues to be managed as these devices start accessing corporate networks and assets. LANDesk is already leveraging its management platform to start managing devices that are not necessarily brought into the enterprise by IT but might have corporate data on them. Further, the proliferation of different operating systems and data formats requires a cross-platform approach to managing multiple devices from a single platform, a capability that LANDesk already created.
- ☒ **Cloud-based management for smaller organizations.** Smaller IT organizations need standardized endpoint management at a price point they can afford. Frequently, these smaller organizations lack a sizable IT organization with many IT people. Such an organization would benefit from a software solution as a service for organizations with as few as 20 employees based on a subscription model and delivered through an off-premises model.
- ☒ **Desktop virtualization.** While the company currently offers an application virtualization solution, LANDesk can also move to provide a virtualization solution based on an underlying hypervisor. A hypervisor can provide an additional level of security as well as an additional layer of management, so care must be exercised in such an offering. But as organizations deal with applications that work on one set of operating environments (Windows XP) but may not work on another set of operating environments, the company provides customers and prospects with more flexibility.

CONCLUSION

Effective delivery of IT-related services to customers is the goal of all IT organizations. However, achieving that goal depends on many factors relating to the people, processes, and technologies involved in delivering the service. IT executives need solutions that automate manual processes to provision new servers and desktops that automate configuration and change processes and that support endpoint security. Automated solutions are the key to IT cost reduction, service improvements, and the ability to react quickly to support business changes and add new capabilities.

In this study, IDC's interviews with IT managers and professional staff addressed the business value of automating their organization's change and configuration management processes using LANDesk solutions. These benefits were categorized

across three different areas and resulted in an average annual savings of \$32,022 per 100 users for the organizations that were interviewed. On average, these organizations were able to achieve significant business value from using LANDesk solutions, with a strong three-year ROI of 698% and a short average payback period of only 5.1 months.

APPENDIX: IDC'S ROI METHODOLOGY

IDC utilized its standard ROI methodology for this project. This methodology is based on gathering data from current users of the technology as the foundation for the model. Based on these interviews, IDC performs a three-step process to calculate the ROI and payback period:

1. Measure the savings from reduced IT costs (staff, hardware, software, maintenance, and IT support), increased user productivity, and improved revenue over the term of the deployment.
2. Ascertain the investment made in deploying the solution and the associated training and support costs.
3. Project the costs and savings over a three-year period and calculate the ROI and payback for the deployed solution.

IDC uses the NPV of the savings and increased revenue over three years in calculating the ROI and payback period for the deployment. The NPV of the savings is determined by subtracting the amount that would have been earned by investing the original sum in an instrument yielding a 12% return (to allow for the missed opportunity cost that could have been realized using that capital).

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

1. Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.
2. Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.
3. The impact of unplanned downtime is quantified in terms of impaired end-user productivity and lost revenue.
4. Lost productivity is a product of downtime multiplied by burdened salary.
5. Lost revenue is a product of downtime multiplied by the average revenue generated per hour.
6. The NPV of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

Because every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

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