**netadmin**

# BSS/OSS STRATEGIES

## PROS AND CONS OF TWO DIFFERENT STRATEGIES

## INTRODUCTION

We have delivered over 100 BSS/OSS projects to customers and partners around the world. In this text, we will share some of the experiences we have gathered while working together with them on building their BSS/OSS landscape.

Here, we will cover two types of strategies we often see, share the pros and cons, and show our approach. The strategies we will share experiences about can be categorized as generic multi-industry solutions and best-of-breed solutions.

## GENERIC MULTI-INDUSTRY SOLUTION

Let us start by looking at what we call generic solutions or multi-industry solutions. These solutions are the typical well-established brands of products used in a wide range of industries and markets. They are widely adopted and used and often seen as a safe option.

Some of the things that categorize these multi-industry systems are that they are highly flexible because they need to work in a wide range of industries. They typically have generic core business logic and data models with limited or no industry-specific support.

Industry-specific support with these tools requires heavy customization, and, in some cases, the core product is only a workflow engine where you need to develop the processes of your specific industry and business.

These systems come with advantages. Being widely adopted is one of them. We have learned and seen that they also come with a couple of disadvantages. We've heard from several operators that the disadvantages and consequences are often not fully realized before it's too late. Too late in the sense that the investments have already been made and much time has been spent on the project.

Two of these disadvantages are that these suppliers typically don't have the same know-how and can't provide industry best practices in our customer's case, telecom and the fiber business. The result of the lack of industry-specific know-how and the need for heavy customizations require extensive implementation and customization projects.

Something that we often hear from new customers is that they have tried to use these kinds of multi-industry solutions when they began to look at their BSS/OSS stack but soon realizing that a purpose-built solution would not only work better but also require less total investment.

Based on the hundreds of projects that we have done, we have found several key success and key failure factors of IT projects, and one of the most important factors is the size of the project.

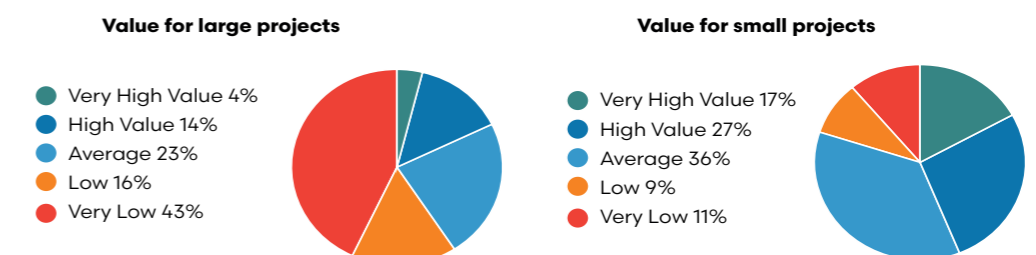## RESEARCH SAYS THAT SMALLER IT PROJECTS ARE MORE LIKELY TO SUCCEED

Many have been involved in an IT project which has failed or at least has not met its targets. Research in this area has been done by an organization that is quite well known, the Standish Group.

The Standish Group is an independent international IT research advisory firm. It was founded in 1985and is well known for reporting on IT projects' success and what makes IT projects work or don't work across both the public and private sectors.

Their key work is the bi-annual CHAOS report. What they do is that they measure the outcome of different IT projects in different industries and of different sizes. The table below is from the report, and it shows the success of projects based on their size.

| | SUCCESSFUL | CHALLENGED | FAILED | TOTAL |
|---|---|---|---|---|
| Grand | 6% | 51% | 43% | 100% |
| Large | 11% | 59% | 30% | 100% |
| Medium | 12% | 62% | 26% | 100% |
| Moderate | 24% | 64% | 12% | 100% |
| Small | 61% | 32% | 7% | 100% |

This aligns very well with our impression and what we hear from customers. The bigger the project, the higher the risk of failure, and correspondingly the lower the chance of success. The graphs below show their assessment of the value for different projects by comparing what you gain and investing in the project. Looking at the graphs, it becomes even more evident that you risk not getting the value you might expect if you are working with large implementation projects. We believe that it is crucial to keep projects down in size.

**Value for large projects**

- Very High Value 4%
- High Value 14%
- Average 23%
- Low 16%
- Very Low 43%

**Value for small projects**

- Very High Value 17%
- High Value 27%
- Average 36%
- Low 9%
- Very Low 11%

## BEST-OF-BREED SOLUTIONS

Let us look at the second strategy that we often see, and that is a best-of-breed approach. Best-of-breed means that you have individual point systems solving their specific task. Those systems often only involve a single department, and thus each department can choose what they believe to be the best system for them. You cherry-pick the best system in each category, which might sound like a good idea where everyone gets exactly the system they want. The issue is that many business processes in our industry, such as the delivery of fiber-based broadband service, are cross-functional and involve everything from marketing to sales to the operational teams to finance.

The same is true for many other different business processes, such as assurance. Because of that, and because they involve multiple departments, they require coordination and interaction between several different systems, and this needs to be handled to automate the processes.

To grow efficiently, you need to automate as many processes as possible, and to do so, you need to integrate your different systems. Let us say that you have a business process of delivering a service to a customer in this scenario (image below). A situation like this would involve multiple systems. Each integration here needs to be implemented, developed, and maintained, which you perhaps do not think of when you start. Let us imagine that we would need to upgrade one system. A consequence of that could be that we have to update and spend time and money on re-engineering all the different integrations involved in that system. To some extent, this can be mitigated by using an enterprise service bus or a similar solution, but that requires additional investments as a service bus as a system in itself.
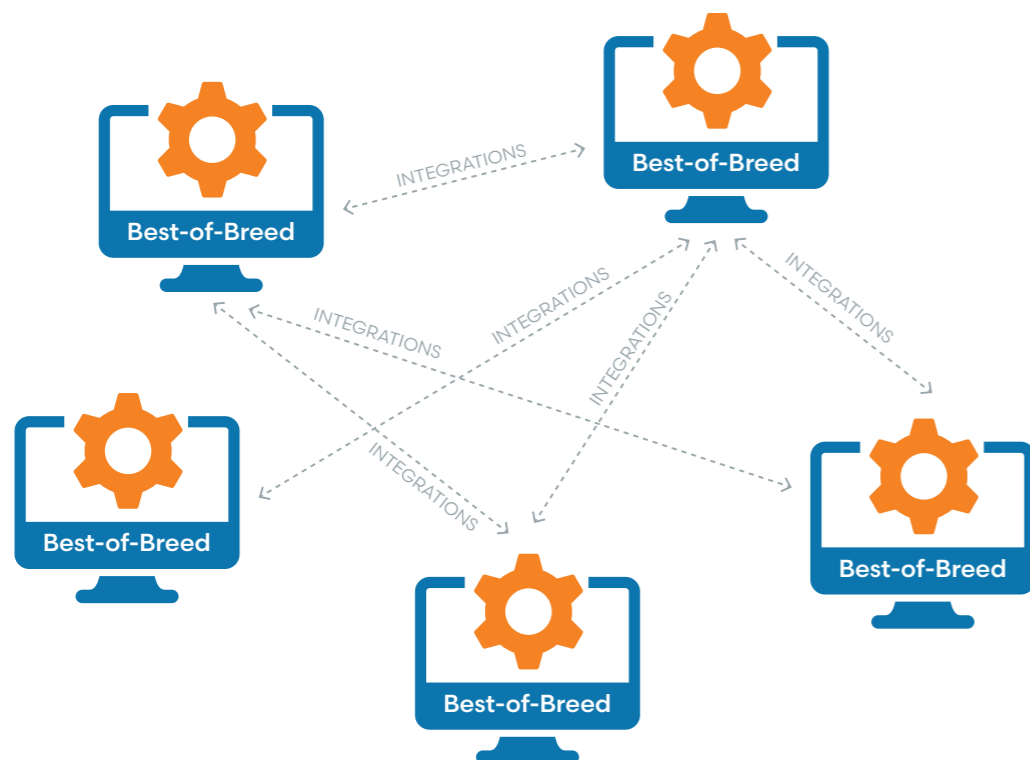
We often see this happen in a best-of-breed scenario because it's quite easy to end up in a situation where the integrations are either not done at all or are gradually degraded. After all, systems are upgraded, and the integrations are not maintained to uphold the business process automation needed. The result is often a disconnected system landscape of individual" best" systems that don't work together. They get stuck with their database of isolated data, and you aren't getting the value of combining data from multiple systems, and the business processes that you need to automate are not that automated.

## "THE DOWN-SIDE OF A BEST-OF-BREED APPROACH IS THE ISSUES ASSOCIATED WITH MULTIPLE SYSTEMS, DATABASES, AND VENDORS."

The quote above is from the Ultra Consultant software blog. Although there are certainly merits and pros of this approach, we also believe that it is essential to understand his approach's cons and potential negative consequences.

Another quote that well captures the challenges with the best-of-breed approach is this quote from the Institute of Electrical and Electronics Engineers.

"Usually the systems integration in traditional designs is consistently underestimated. The increasing complexity of systems integration poses many challenges to system developers and integrators. During this phase, unexpected and unforeseen issues have rise. Most of these issues are inter organizations/ inter subsystems. When the project gets more complex, with more users, more suppliers, more processes within the company, and more functions and subsystems, the integration phase of the system becomes extremely difficult."

The essence of this quote is that the overall complexity increases rapidly when increasing the numbers of users, systems, and suppliers. That will create costs that you might not think of when you start these projects, and they are often underestimated and not discovered before it's too late.

## THE NETADMIN APPROACH

At Netadmin, we have a different approach. Most importantly, we build our software specifically for fiber operators, so it's purpose-built for that industry. It enables us to build products with an optimal balance between built-in industry-specific functionality and flexibility.

Because we develop our system specifically for fiber operators, we have gained a lot of domain experience, which we are happy to share with our customers. If you are a greenfield fiber operator, we can provide many best practices on how you could quickly structure and develop a BSS/ OSS landscape.

Our approach is to have a framework of pre-integrated capabilities and add-ons, which are product components that can be combined into a solution that fits your needs. They are pre-integrated, meaning that they work together from day one. They can also work together with other systems. Because they are pre-integrated, you do not have to spend time and money on implementing and maintaining as many integrations between different systems that you would need in a Best-of-Breed approach.

Much of the product development that we do, we do together with our customers. We develop new add-ons and enhance our products to meet their needs. We believe that this will help all of our customers as they are all in the same industry and, to a large extent, share the same problems.

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Netadmin creates a software solution enabling painless growth of and transition to fiber networks. Our solutions reduce time to market, eliminate downtime and increase the subscriber quality experience. With more than 10 years of experience in the fiber OSS market, providing services for more than 75 customers worldwide we provide software solutions for a lightning-fast connected world.

The company is owned by Volaris Group, an operating group of the Toronto-based software service provider Constellation Software Inc.

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