

# SOLVING THE MYSTERY OF SDN & NFV SOLUTIONS EVALUATION

SYTEL REPLY'S VADVISOR TOOL WILL HELP YOU.

In a world where technology is evolving with extreme speed and the networking revolution has already started, organisations are facing a major challenge in understanding, evaluating and selecting networking solutions, which will allow them to future proof their infrastructure. The SDN vAdvisor is the key to unlocking the mystery.

The SDN vAdvisor is an application aimed at informing and assisting anyone who is interested in SDN technologies, or is looking to implement SDN within their infrastructure, in making advised decisions towards future proofing their networks.

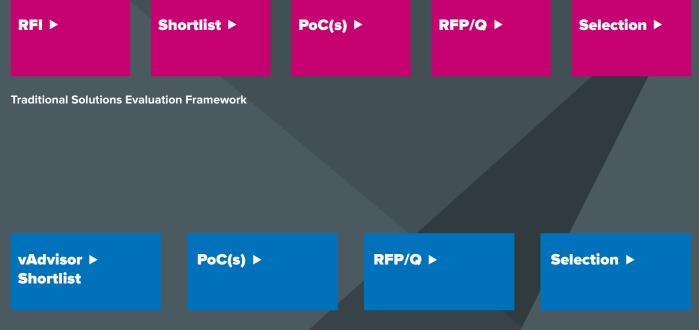
### SDN & NFV SOLUTIONS EVALUATION FRAMEWORK

Organisations today are required to be agile and responsive to new trends and technologies, which are disrupting their environments. They are constantly required to:

- Rapidly adopt the latest technologies, whilst at the same time they are challenged to deliver excellent customer service;
- Make strategic decisions for creating new revenue channels or decreasing cost;
- Transition to becoming digital organisations, in order to future proof their environments.

Sytel Reply has incepted a solutions evaluation framework, which allows organisations to manage the transition towards Software-Defined Networking (SDN) and Network Function Virtualisation (NFV) in an effective and agile way. Traditional methodologies of evaluating solutions in an ever changing environment are not efficient, neither effective anymore.

Sytel Reply's framework allows customers to reduce the traditional cycle of solutions evaluation. This is achieved by integrating in the process, the expertise and vendor agnostic knowledge that we have acquired over the past three years of working within the SDN and NFV space, which is delivered through a knowledge base tool, the SDN vAdvisor.



Sytel Reply's Solutions Evaluation Framework

### **FUTURE NETWORK TRENDS**

Many organisations across a number of diverse sectors are in the process of transforming their infrastructure and moving towards digital convergence having realised that new technologies and trends could allow them to create new revenue channels and explore new opportunities.

There are a number of trends that will drive and revolutionising the networking industry, which means that organisations need to be ready to understand them, in order to cope with the fast pace changes within the networking landscape. Some of the major future network trends include but are not limited to the following:

### · CLOUD COMPUTING

Utilisation of resources within shared pool environments for fast development of services and applications in a flexible way.

### NETWORK AUTOMATION

Approach for standardisation of services and reduction of deployment time via the use of predefined templates for automated provisioning.

### NETWORK FUNCTION VIRTUALISATION (NFV) Virtualisation of all layers' network functions previously done in dedicated HW, for cost & time to market reduction and flexibility.

## SOFTWARE DEFINED NETWORKING (SDN) Creation of dynamic and flexible networks by decoupling the control from the data plane and by introducing automation, programmability and new software-based capabilities in the network.

### ORCHESTRATION

An approach for achieving and enabling the automated arrangement, coordination, and management of all the other technologies and services.

### OPEN NETWORKS

Open source is one of the main drivers of this change attracting the attention of big organizations and vendors nowadays, something not usual in the past. Forcing the market to become more open and interoperable than closed and proprietary.

The aforementioned trends are the key components that will shape the future of networking and enable organisations to future proof their infrastructure and adopt innovative technology trends.

### THE CHALLENGE

Organisations who are looking to adopt and deploy SDN technologies within their infrastructure have to overcome the challenge of **selecting the right solution from a plethora of options**, which are constantly increasing in the market. Traditional networking vendors are structuring their offerings around SDN, innovative niche vendors are entering the networking market and introducing new solutions, whilst in parallel open source networking projects are maturing and being adopted by major organisations, as part of their future networks strategy. To further complicate things, no single solution fits all scenarios. Different solutions address different Use Cases, support different technologies and offer different features, resulting in different benefits.

Anyone, who is interested in deploying SDN and realising the benefits associated with it, is required to answer an increasing number of questions, which include the following:

- · "Which vendor should I speak to?"
- "Should I go for an open source solution instead?"
- · "Do I need both?"

In addition to the vast variety of offerings, rapid research and development efforts, by both the research community and vendors, result in software upgrades / updates of the existing solutions being released at much faster pace than traditional stable legacy networks. Existing features are enhanced and new ones are introduced, allowing the solution to offer more capabilities, which adds complexity and requires more time to understand and evaluate the changes.

All these factors increase the already lengthy process of solution evaluation and contribute to delaying a decision on deployment. In some situations, organisations will speak directly with their existing vendors due to the fact that they already have legacy infrastructure that they need to support and it seems that it is the right decision. They are however risking the opportunity of exploring new innovative solutions, which can allow them to innovate.

To overcome this challenge organisations need to dedicate resources and time into research, engagement with experts in the areas of SDN and NFV, and to define their Use Cases and target architecture. Only once they have a clear idea of what they would like to achieve by introducing SDN and NFV in their infrastructure, can they then start the solutions evaluation process.

### THE SOLUTION

Since 2010, Sytel Reply has been consulting and assisting customers in defining their strategy and architecture to future-proof their networks and has been specialising in SDN and NFV since their more recent emergence.

Following extensive research and engagement with the industry in the area of SDN and NFV, Sytel Reply has built an **extensive Knowledge Base and understanding** of the different options that exist in the market.

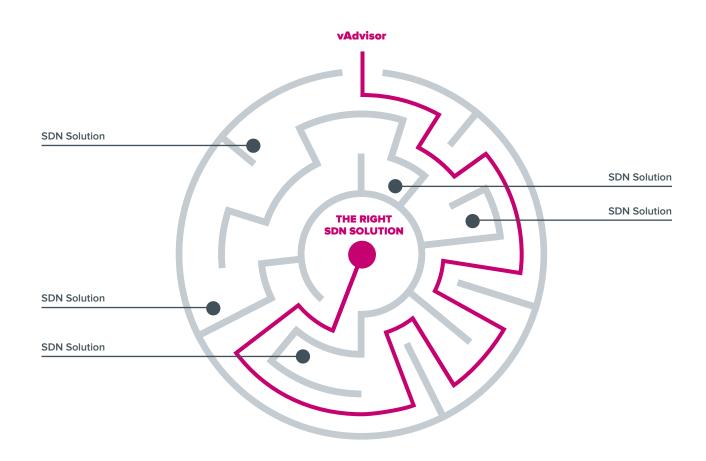
This has resulted in the creation of the SDN vAdvisor, which is a component of Sytel Reply's SDN Solutions Evaluation Framework and is the key contributing factor in drastically reducing the traditional solutions-evaluation process.

As an application, the **SDN vAdvisor** is aimed at informing anyone who is interested in SDN technologies, or is looking to implement SDN within their infrastructure, and assist them in making informed decisions towards future-proofing their networks. The SDN vAdvisor enables a search for SDN solutions, based on predefined criteria, including business needs, technical features, Use Cases and more. The idea behind the SDN vAdvisor is to allow those considering SDN technologies to quickly and simply narrow down the various offerings, whilst saving time and cost in the process of conducting RFIs for such information at the same time.

Currently, the application is focussed on the key component of SDN, i.e. the SDN Controller, due to the fact that it is the enabler for any SDN ecosystem. It provides information about various SDN controllers on the market and provids a rich set of information to enable an informed selection decision. — ranging from the type of interface supported to who is currently using them and how.

What makes the SDN vAdvisor so special is that it offers benefits for both purchasing organisations, as well as solution providers.

Purchasing organisations can search for specific features they require in a controller and identify the right solutions to focus on from the very beginning, whereas Solution Providers can use the database as a way to advertise the solutions and products they have to offer.



### **SDN & NFV OFFERINGS**

Through its distinct competencies, Sytel Reply assists clients in realising the benefits and dealing with the impacts of the disrupting technologies on their environments.

Sytel Reply leverages real-world experience in SDN and NFV consulting for the TMT market, having worked with global Telco providers and established strong relationships with all major SDN vendors. Through active collaboration with various vendors and, by forming partnerships with educational institutions, as well as performing internal research and development, Sytel Reply creates and supports innovative projects around new technologies, such as SDN and NFV.

Sytel Reply builds upon this knowledge and partners with its clients to define their strategy and identify the trajectory they should follow towards adopting these disruptive technologies, for future proofing their environments and their investments.

Sytel Reply builds on the basis of understanding the customer requirements and selecting the optimal solution towards programmability, service agility, automation and openness in their networks, in a vendoragnostic way.

### SDN/NFV SOLUTION EVALUATION

- VENDOR EVALUATION & DRAFTING OF RFI/P/Q
- TECHNICAL CAPABILITIES & FEATURES ASSESSMENT
- · BUSINESS EVALUATION, INCLUDING TCO, ROI AND BUSINESS IMPACT ASSESSMENTS

### SDN/NFV TECHNICAL CONSULTING

- SDN ARCHITECTURE DEFINITION & BLUEPRINT CREATION
- TECHNICAL USE CASES DEVELOPMENT, ASSESSMENT & TESTING
- PROOF OF CONCEPTS, TESTING DEFINITION, DESIGN, PLANNING & IMPLEMENTATION

### SDN/NFV SECURITY

- EVALUATION OF SECURITY WITHIN SDN/NFV SOLUTIONS
- SECURITY IMPACT ASSESSMENTS FOR INTRODUCING SDN/NFV AND NEW TECHNOLOGIES
- SECURITY POLICY DEFINITIONS FOR ADOPTION OF NEW TECHNOLOGIES IN ALIGNMENT TO BUSINESS REQUIREMENTS

### INNOVATION CENTRE

- RESEARCH & DEVELOPMENT, SUCH AS VIRTUAL LAB AND DEMONSTRATION ENVIRONMENT
- CREATION OF BUSINESS CASES AND PLANNING FOR GREENFIELD SCENARIOS

### SDN/NFV COMMUNITY & EDUCATION PARTNERSHIPS

- PARTICIPATION IN SDN/NFV COMMUNITY, FORUMS AND INITIATIVES
- PARTNERSHIPS WITH UNIVERSITIES FOR INITIATION OF CUTTING EDGE RESEARCH PROJECTS
- · WHITE PAPERS & RESEARCH PUBLICATIONS



**Sytel Reply UK** is the Reply Group Company specialising in an open and pioneering consultancy approach that helps clients successfully innovate and transform in today's ever-changing digital world. With a 'Give to Get' mentality, Sytel Reply UK enables clients to grow through the development and delivery of secure, compliant and future-proofed solutions for some of the largest telco and media enterprises worldwide. By bridging the gap between technology and business, Sytel Reply UK focuses on increasing revenue streams and efficiency, whilst reducing costs and time to market.

Founded in 2010, Sytel Reply UK is a focused, dedicated, agile group of talented and experienced technologists and consultants. Sytel Reply UK is part of Reply, a network of highly specialised companies focused on the design and implementation of solutions based on new communication channels and digital media.

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