



2014 Global Video Encoding and Transcoding
Entrepreneurial Company of the Year Award



F R O S T & S U L L I V A N



50 Years of Growth, Innovation & Leadership

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Background and Company Performance

Industry Challenges

Customers and vendors alike are facing significant challenges related to multi-screen content delivery and monetization.

The rise of BYOD and Internet video has forced every type of media and entertainment company – whether a broadcaster, MSO, Telco, DTH service provider, online video service provider, or studio – to simply become a content company. In the face of changing content discovery and experience preferences, content companies across the board are grappling with competitive pressures to maximize quantity and quality of online content offered. The problem is that they have not yet achieved the ability to meaningfully monetize online content. This forces a tradeoff between CAPEX and OPEX on the one hand, and ability to deliver TV Everywhere to fickle customers on the other. Where the focus of OTT video was once on format translation, today an end-to-end approach spanning workflows, delivery and monetization, is urgently needed. Moreover, content companies are looking for single vendors who can deliver the entire solution in customized and agile fashion.

Traditionally scale and performance has been achieved using hardware, but this is option is too rigid amidst the current breakneck pace of consumer-driven change. To maintain business agility while controlling up front investments, there is growing interest in using the cloud. Frost and Sullivan's ROI analysis shows that, leveraged well, the cloud can deliver elasticity and economies of scale in much more efficient way than fixed on-premises hardware installations. Costs of software platforms are coming down even as their computational capacity rises, making the value proposition even more attractive.

Major disruptions such as UltraHD and HEVC are on the horizon. However, rollout plans need to be flexible since the rest of the ecosystem has yet to fall in place and the specifications for these new technologies are themselves in flux. Thus, it is imperative to deliver real-time production-grade systems in software form factors so customers can immediately benefit from state of the art technology but are not locked in to the status quo. Thus software-upgradable products and software-reconfigurable products are increasingly necessary.

From a vendor perspective, AVC has emerged as the de-facto video compression standard, out of a format war that was full of chaos and fragmentation as recently as three years ago. This settling, coupled with the rapid and unanticipated rise of OTT video consumption on portable devices, has shifted the video transcoding battleground from one of niche workflows and cross-format compatibility to one of scale and agility.

In the face of such flux, many traditional leaders in the encoders and transcoders industry have begun to struggle to maintain market share. In contrast, younger and more agile companies have quickly moved up the ranks to become formidable forces. These are

typically eventually acquired by larger vendors, but it has still been difficult for many of the stalwarts of the industry to truly reinvent themselves away from siloed hardware offerings towards agile, software-defined, end-to-end solution offerings. Imagine Communications, as the reinvented Harris Broadcast, has done a remarkable job of transforming their strategy, their brand and their product portfolio to be optimally positioned to thrive in today's and tomorrow's market conditions. Through internal reorganization, a series of strategic acquisitions, a breakneck pace of transformation, and a compelling message of forward-looking value proposition, Imagine Communications has established a new benchmark for the industry.

Entrepreneurial Innovation and Customer Impact of Imagine Communications

Market Disruption

The video creation and delivery ecosystem is changing at every stage of the workflow. In transcoding, an alphabet soup of video compression acronyms has given way to the uniformity of AVC, and the challenge has now shifted to maximizing throughput, density and agility while minimizing total cost of ownership. CTOs report that their top priority is solving the monetization issue, and Pay TV operators are struggling to retain customers even as online video volumes are growing 3X-5X year on year. Delivering personalized search, recommendation and advertising is arguably the most urgent unsolved problem facing the industry today. IP is transforming broadcast workflows. Software-based and software-defined products, particularly those based in the cloud, have the potential to solve the industry's need for cost-effective, agile and scalable workflow platforms. However, it is not simple to translate traditional hardware based implementations into the cloud.

Harris Broadcast recognized these market disruptions, and moved quickly and aggressively to counter them and get ahead on the leadership curve. The company separated its broadcast equipment business (Harris Broadcast), and made Imagine Communications its first strategic acquisition. Differentiated by a high density ABR transcoding product that was well adopted for OTT and IPTV use, Imagine Communications gave Harris a competitive product for modern video use cases, a valuable pool of engineering expertise, and a brand that could stand for forward looking possibilities.

Rebranding itself Imagine Communications, the company made a second key acquisition in early 2014 – Digital Rapids, a key vendor covering both post-production and multi-screen transcoding use cases, accounting for a significant stake in the overall transcoders market. More importantly, Digital Rapids' Kayak platform had been built in anticipation of the rising importance of software-defined, automated workflows that can incorporate best of breed components into a hybrid architecture that can span on-premises and public-cloud infrastructures.

Put together, the new Imagine Communications is in a position to strongly vie for decisive leadership in the fragmented and chaotic M&E video transcoders market. More importantly, Imagine Communications is proceeding to make a strong play across the board in online video workflows, spanning ingest through post production, and delivery through monetization. The company is continuing to grow towards this vision organically and via acquisition – most recently acquiring OpenTV's Advanced Advertising Business Unit from the Kudelski Group.

Market Gap

One of the key restraining factors for the M&E industry, according to Frost and Sullivan research, is the existing prevalence of legacy, proprietary equipment. Whether in terms of broadcast infrastructure, head-end equipment or consumer equipment, content companies today are locked into hardware-centric, vendor-specific investments. This limits the pace at which existing content companies can evolve and experiment, causing frustration and holding the entire industry behind. In contrast, new online video service providers are unencumbered and can thus move far more aggressively in capturing new market opportunities.

Imagine Communications, despite its legacy in hardware, took the bold stand of embracing a far more open, software-centric ecosystem. This required the courageous trade-off of ceding some business benefits of lock-in in order to open up broader advancement. Responding to the urgent and critical need of the market for flexible, interactive components that could be assembled and leveraged in best of breed fashion, Imagine Communications is reshaping its product portfolio around software implementations running on commercial off the shelf (COTS) computing infrastructure. By taking the stand of supporting open standards and interoperable offerings, the company may in fact be laying the foundations for a much-needed revitalization of the entire digital media industry, which has begun to stagnate under the onslaught of customer churn, falling prices, commoditization and technology flux.

Additionally, Imagine Communications was quick to recognize that while the broadcast industry needs to migrate towards IP, it is extremely difficult for companies to implement this migration in wholesale fashion. There is need for an evolutionary rather than a revolutionary approach, and Imagine Communications' refreshed line of products reflects the ability for this type of gradual migration.

Imagine Communications is focused this year on solving four urgent and critical needs for its customers:

1. Accelerate the transition from baseband to IP, which is needed to achieve operational efficiencies and modernized workflows
2. Enable playout from the cloud to increase viewer/device reach and maximize quality of experience while controlling costs

3. Enhance advertising monetization opportunities across multiple distribution platforms
4. Allow content companies to be agile in terms of workflows, business models and content experiences, through an innovative approach to product and platform design and deployment

This represents the kind of radical and agile thinking that to date has typically been seen only in new, small companies. The importance of a major stakeholder like Imagine Communications taking this approach is that they have the sales and business development resources to take disruptive solutions very aggressively to the global market, and the engineering resources to maintain a blistering pace of innovation across multiple product fronts. Accordingly, the company is in a position to truly move the proverbial needle, both for themselves and for the entire ecosystem.

Competitive Differentiation

The video encoders and transcoders market is crowded and competitive. There are over 80 vendors vying for a piece of a sub-billion dollar market. According to Frost and Sullivan's analysis, the fiercely fought multi-screen transcoders segment saw over 35 vendors grapple for a share of less than 200 million US dollars in 2013, with no vendor crossing 15 percent in market share by revenue. As silicon cores and AVC compression maturity cause commoditization to creep in, many competitors are responding by increasing channel density and slashing prices. Ironically, many of these vendors report that the loss of revenue through decreased prices is not compensated for by a corresponding rise in unit sales. This puts the industry in a negative spiral, hindering innovation by vendors and their customers alike.

Imagine Communications, in contrast, has chosen to differentiate through value and through a customer-centric approach to product line revitalization. For example, to date, content companies have had to stitch together individual components from various vendors to implement workflows that work optimally for their businesses. Given the levels of flux and disruption in online video, this has left many companies floundering with sub-optimal implementations, while system integrators are laughing all the way to the bank. Recognizing this problem, Imagine Communications has chosen to differentiate by "leading the industry to a future defined by IP, software, the cloud and TV Everywhere, with an architecture vision for delivering and monetizing multiscreen content". By serving as a single-stop vendor for end digital media needs, the company is well positioned to become a long-term partner for content companies seeking to reinvent themselves in the face of growing competition and increasing de-centralization of video discovery and experience. This also resonates well with growing content company preference for a single vendor who can simplify workflows, so that the companies can focus on what they do best – which is develop and deliver branded content offerings that delight and attract customers, and therefore advertisers. This makes it one of the few companies to offer a state of the art end to end workflow under one umbrella, which is important from a blue

ocean strategy perspective.

In terms of migration to IP-based workflows, Imagine Communications is differentiating by being a proponent of persona-based migration, allowing a gradual transition as opposed to imposing “forklift upgrades”. This significantly reduces risk and upfront investment while accelerating transition and realization of benefits.

The company is also aggressively re-architecting traditionally hardware based form factors into software on COTS hardware, but with hardware-competitive reliability and performance, to remain competitive against other vendors in the market. In this space, Imagine Communications differentiates through its significantly larger sales force and engineering force, as discussed earlier.

Brand Equity

Harris Broadcast is among the best recognized and most respected brands in the media industry, standing for reliability, scale and traditional dominance. Imagine Communications has very effectively made the transition from this solid but dated brand towards a fresh image, rooted in reliability but positioned for aggressive, forward-looking innovation and growth. By assimilating the Digital Rapids team, Imagine Communications benefits from the significant goodwill and trust of that brand, which comes from their long presence in the industry and their reputation as a reliable provider of video workflow products with scale, longevity and agility. Through consistent and pervasive marketing energy that is rooted in customer testimonials and visionary messaging, the company is ensuring that its revitalized brand is recognized and is increasingly equated with a strategically savvy, monetization-focused and customer-centric vision. Partners such as Cisco, Microsoft and IBM and customers including Disney, Liberty Global, Seven Networks Australia and HBO have discussed competitive best practices and business model evolution in the context of Imagine Communications’ media, playout and networking products. The consistent message has been that bringing the IT benefits of Murphy’s Law to bear on digital media problems results in better economies of scale, better flexibility and better agility – and ultimately in more profitable, more popular content services.

Conclusion

Imagine Communications has taken the Harris Broadcasting legacy of engineering excellence and massive industry presence, and infused it with a modern and forward-looking approach to serving an industry that is being changed – and changed rapidly – by IP, the Internet and BYOD. The company is investing over 100 million USD per year in R&D dollars/year in R&D to build agile, software-defined products and solutions to manage, move and monetize video content. Poised to take a leading position in the fragmented and fiercely fought video transcoding market in 2014, the company’s goal is to become the one-stop shop for all digital media workflow needs from the camera to the customer/consumer. Imagine Communications boasts over 3000 customers around the world and over 3 million

products deployed worldwide. The company states that they power 80% of the world's top media suppliers and half the world's video channels, accounting for USD 25B in advertisement sales and 2 trillion advertisement impressions.

Despite this vast size, the company has taken an extraordinarily disruptive and nimble stand to reinvent themselves in the face of changing market dynamics. Through their energetic management team, bold product strategy, decisive acquisitions and fast-paced execution, Imagine Communications has demonstrated all the best practices that Frost and Sullivan seeks in an Entrepreneurial Company of the Year nominee. Accordingly, we are honored to declare Imagine Communications as Frost & Sullivan's 2014 Entrepreneurial Company of the Year.

Significance of Entrepreneurial Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. In a sense, then, everything is truly about the customer—and making those customers happy is the cornerstone of any long-term successful innovation or growth strategy. To achieve these dual goals (customer engagement and growth), an organization must be best-in-class in three key areas: understanding demand, nurturing the brand, differentiating from the competition. This three-fold approach to successful entrepreneurship is explored further below.



Understanding Entrepreneurial Leadership

Demand forecasting, branding, and differentiation are part of an entrepreneurial company's larger journey toward forming deep relationships with customers and permanently altering the market with their actions. These two concepts—entrepreneurial innovation and customer impact—are therefore the cornerstones of this award, as discussed further in the next section.

Key Benchmarking Criteria

For the Entrepreneurial Company of the Year Award, we evaluated two key factors—Entrepreneurial Innovation and Customer Impact—according to the criteria identified below.

Entrepreneurial Innovation

- Criterion 1: Market Disruption
- Criterion 2: Competitive Differentiation
- Criterion 3: Market Gaps
- Criterion 4: Blue Ocean Strategy
- Criterion 5: Passionate Persistence

Customer Impact

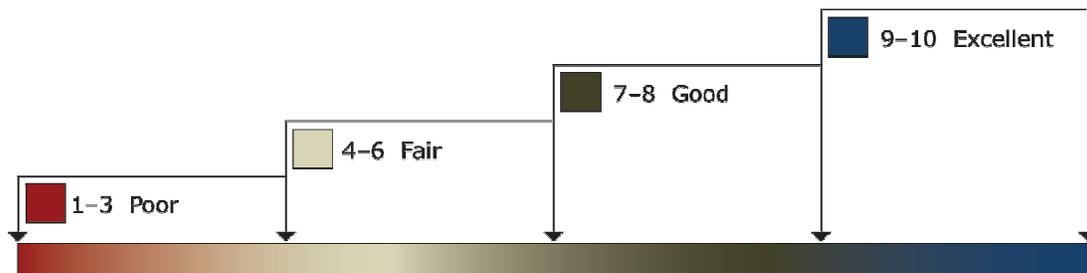
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

Best Practice Award Analysis for Imagine Communications

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard is organized by Entrepreneurial Innovation and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key players in as Competitor 2 and Competitor 3.

DECISION SUPPORT SCORECARD FOR ENTREPRENEURIAL COMPANY OF THE YEAR AWARD (ILLUSTRATIVE)

<i>Measurement of 1-10 (1 = poor; 10 = excellent)</i>			
Entrepreneurial Company of the Year	Entrepreneurial Innovation	Customer Impact	Average Rating
Imagine Communications	10	10	10
Competitor 2	8	7	7.5
Competitor 3	9	6	7.5

Entrepreneurial Innovation

Criterion 1: Market Disruption

Requirement: Innovative new solutions that have a genuine potential to disrupt the market, obsoleting current solutions and shaking up competition

Criterion 2: Competitive Differentiation

Requirement: Deep understanding of both current and emerging competition to create and communicate strong competitive differentiators in the market

Criterion 3: Market Gaps

Requirement: A clear understanding of customers’ desired outcomes, the products that currently help them achieve those outcomes, and where key gaps may exist

Criterion 4: Blue Ocean Strategy

Requirement: Strategic focus in creating a leadership position in a potentially “uncontested” market space, manifested by stiff barriers to entry for competitors

Criterion 5: Passionate Persistence

Requirement: A deep belief in the “rightness” of an idea, and a commitment to pursuing it despite seemingly insurmountable obstacles

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market

Criterion 2: Customer Purchase Experience

Requirement: Customers feel like they are buying the most optimal solution that addresses both their unique needs and their unique constraints

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company’s product or service, and have a positive experience throughout the life of the product or service

Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality

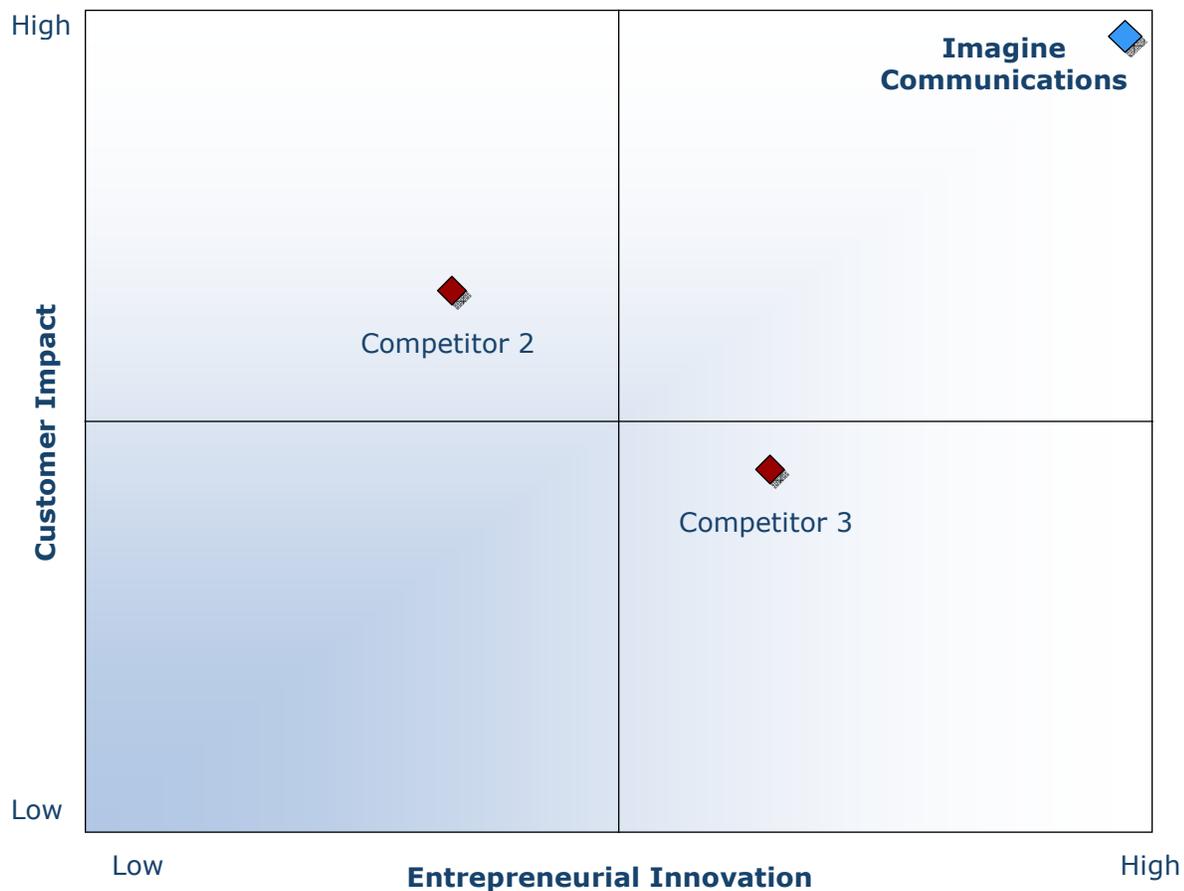
Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts can then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.

DECISION SUPPORT MATRIX FOR ENTREPRENEURIAL COMPANY OF THE YEAR AWARD (ILLUSTRATIVE)



The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan’s 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Our awards team follows a 10-step process (illustrated below) to evaluate award candidates and assess their fit with our best practice criteria. The reputation and integrity of our awards process are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning all candidates' performance relative to one another
3 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps 	Detailed profiles of all ranked candidates
4 Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • Share findings • Strengthen cases for candidate eligibility • Prioritize candidates 	Refined list of prioritized award candidates
6 Conduct global industry review	Build consensus on award candidates' eligibility	<ul style="list-style-type: none"> • Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates 	Final list of eligible award candidates, representing success stories worldwide
7 Perform quality check	Develop official award consideration materials	<ul style="list-style-type: none"> • Perform final performance benchmarking activities • Write nominations • Perform quality review 	High-quality, accurate, and creative presentation of nominees' successes
8 Reconnect with panel of industry experts	Finalize the selection of the best-practice award recipient	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select winner 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform award recipient of award recognition	<ul style="list-style-type: none"> • Present award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance 	Announcement of award and plan for how recipient can use the award to enhance the brand
10 Take strategic action	Share award news with stakeholders and customers	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess award's role in future strategic planning 	Widespread awareness of recipient's award status among investors, media personnel, and employees

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.