CODESPRING

OUR CODE YOUR SUCCESS

Software development & outsourcing

Let's win the race together!

Desktop, Mobile & Cloud Development

2015

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Captain's Journal

CEO's Thoughts

Dear Partners and Friends,

2015 continues the trend of technological transformations that the previous years have been bearing along. Pervasive digitization impacts our daily socioeconomic circumstances. Connectivity is constantly reshaping the way we innovate, we collaborate and we socialize. In such changing waters, Codespring sets forth the essentials for encompassing technological advancements and software development expertise.

17 years of programming elite software systems has taught us that setting the correct course of any project is vital. For that purpose we practice fine-tuning of all available resources, from both provider and customer side. It is a journey of transformation, where the delivery of high efficiency for full software development life cycle builds the core of any strategic partnership.

Cluj-Napoca as a European Youth Capital in 2015 and landlord of the Cluj Innovation City, endorses our community's efforts to unveil the potential of this scenic city from Transylvania, Romania. Featuring distinctive traits, Codespring invites you to discover the benefits of a flexible and tuned collaboration.

Holding in high regard those who trusted us for years, we are ready to put our expertise at your service in order to build proficient software solutions.

Yours sincerely,
Levente Szélyes
CEO

Ship Technical Details

Codespring Facts

Vision:	to build great strategic partnerships
Mission:	to provide high quality expertise and efficiency for full software development life cycle
Core Business:	software development and outsourcing
Ownership:	private
Headquarters:	Cluj – Napoca, Romania (member of the European Union)
Working Experience:	17 years
Working Facilities:	2 (located in Transylvania, Romania)
Team:	+55 employees
Engagement Models:	on-site, near shore and offshore
Languages:	English, Romanian, Hungarian and German
Infrastructure:	virtualization, redundant internet VPN and VOIP connections
Technology Expertise:	desktop, mobile and cloud technologies
Methodology:	Agile, V model, Extreme Programming
Team Education:	Professional academic degree: BScIT, MScIT, MCP, MCTS and SUN certified Java developers
	ISTQB Certified Testers
	ISO 9001:2001 Certified Internal Auditors
Certificates:	Microsoft Gold Certified Partner
	ISO/IEC 27001 Information Security Management System in progress
	ISO 9001:2008 Quality Assurance Certification
Memberships:	Cluj IT Innovation Cluster (founding member)
	Romanian Association for Electronics and Software (ARIES)
	Employer's Association of the Software and Services Industry (ANIS)

Codespring Statistics:

Share of strategic partners in total portfolio:	85 %
Customer retention rate:	90%
Industries of expertise:	9 main industries + other
Employee retention rate:	95%

Flag State

ROMANIA.FACTS.

Accession to EU:	2007
Location:	CEE
Population:	19,942,642 [1]
GDP growth rate in 2014:	2.0% [2]
ICT % to GDP in 2014:	5.2% [3]
ICT activity growth in 2014:	15.3% [4]
ICT turnover structure 2014:	Hardware: 70.3 %
	Software: 14.8 %
	IT Services: 14.9 %
ICT export /turnover 2014:	1.5 billion EURO
ICT Government tax facilities:	no income tax

COUNTRY RANKINGS

Deloitte's CEE Technology Top 50 2014:	4th place
2012 Jones Lang LaSelle Top 10 Outsourcing Destinations Globally:	9th place
A.T.Kearney Global Services Location Index 2014:	18th place
2014 Tholons Top 100 Outsourcing Destinations:	40th place
Fitch Sovereign Rating 2014:	BBB-, stable
Moody's Credit Rating 2014:	Baa3, stable
Standard & Poor's Foreign Rating:	BBB-

CLUJ-NAPOCA.FACTS.

Ranking:	2nd city in Romania
Location:	NW, Heart of Transylvania
Population:	324,576 + cca. 100.000 students
Accessibility:	International airport (26 EU and pan-EU destinations)
Academic center:	11 universities (UBB, UTCN)
IT Hub:	+ 300 IT companies
IT Center:	1st IT export hub of Romania (78% of Romanian IT exports)
Software engineers:	+ 10000 (active)
ICT graduates:	~ 1000 students / year
R&D centers:	~ 200 research units and laboratories
Technology parks:	Tetarom I, II, III, IV
Innovation parks:	Cluj Innovation City (240 ha) Regional Center of Excellence for Creative Industries – CREIC
Multiculturality:	Romanian, Hungarian, German, Dutch, Italian, Serbian and Jewish communities
Multilingual education:	Romanian, Hungarian, German, French, English languages study lines for humanities and STEM
Major Investors in ITC:	DE, UK, USA, NL, A, F, FI, SE
Foreign business clubs:	Dutch, German, British, French, Italian
Economy engines:	Energy, IT&C, Business Services, Medical Services, Tertiary Education

CLUJ-NAPOCA AWARDS

European Youth Forum	Cluj-Napoca, European Youth Capital in 2015
Eurostat	Cluj-Napoca, the Capital of Tolerance, 2014
	Cluj-Napoca, the Friendliest City in Europe, 2014
"Respire" Association in partnership with "We Demain" magazine	Cluj-Napoca, the City with the Cleanest Air in Europe
Huffington Post	Cluj-Napoca, the City that will Shake Up the Art World in the 21st Century
Forbes Romania	Cluj-Napoca, Economic Capital of Transylvania, 2014
KPMG and the Management Authority for the Regional operational Programme (AM POR)	Cluj-Napoca, the most attractive growth pole in Romania

[1, 2, 3, 4] National Institute of Statistics of Romania.

On Board Services

The Business

Founded in Cluj-Napoca, Transylvania region, Romania, Codespring is about providing expertise in software development.

As a Romanian software company, we develop custom solutions and add-ons covering the entire life cycle of a complex software development project.

In the process of building strategic partnerships with our customers we strive to be flexible and creative. Should you be a software company, a software department or another industry specific business, Codespring will always look after your expectations and needs in relation with a software based solution.

Our technically skilled team of software engineers can undertake projects at any stage of development, from requirement analysis & specifications, architecture design, or implementation, to testing, validation and support.

Choose your ticket and the journey for developing quality software may begin!

Sailing Together

The diagram shows concentric circles with the following labels:
- Outer compass points: Customer (top), Time (right), Efficiency (lower right), Codespring (bottom), Quality (lower left), Budget (upper left)
- Middle ring: Human Resources, Infrastructure, Business Continuity, Security
- Inner ring: Software development life cycle
- Center: Fine Tuning

The Big Picture

Codespring's proposition to all its stakeholders is a common journey with a common agenda.

By this logic, any software development project starts with mapping together the conditions of running the processes. Requirements of time, budget, quality and efficiency will be coupled with given infrastructure, human resources, security and business continuity features.

Fine tuning all these variables of a complex equation is the key success factor of state-of-the-art software and service. Codespring understands the diversity of situations that each customer and each industry may have, which is why we are open to combine resources and processes in the optimal way.

Correct business analysis and appropriate requirement specifications will set the tone of any new software development endeavour. Mutual trust opens communication and enhances creativity. Often, software innovations occur when all parties focus on the final outcome: to serve well the end-users (individual or corporate).

Sailing together is the art of cooperation.

Software Development

Keen on achieving highest performances in full software development life cycle, Codespring has a specific approach towards software development. We hereby present you some insights of the process at each stage of development:

- **Business Requirements**

  In order to guide the design of a future system, documenting business requirements is critical. This step will help the team to understand what needs to be done in order to deliver value.

- **Use Case Analysis**

  Understanding how interactions with a system will or should occur has a deep impact on the design of the system. Defining usability prepares the terrain for the entire development.

- **Estimation**

  The overall efforts of developing software must be estimated as accurate as possible. Several estimations techniques serve this process and all parties are aware of potential variations.

- **Architecture Design**

  Planning the actual software development process starts with setting the structures of the system. Next, low-level components and algorithms will take over.

- **Development**

  The core activity of any software development process is coding. Quality of code may be guaranteed by coding standards and code analysis system.

- **Integration**

  Integrating software components, units, subsystems has as objective the setup of a functional system. The better the integration, the faster the system may be used.

- **Testing**

  Potential errors or deviations may be solved by: unit testing, integration testing, system testing, user acceptance testing, etc. The objective is to make sure that the system runs as expected.

- **Maintenance**

  Software Maintenance may focus either on adapting and perfecting the systems in use, either on correcting and preventing errors. Once this activity is planned, the team is ready for action.

Known Seas

Industry Expertise

Codespring has built sound working experience in a set of 9 major specific industries. We have been delivering both long-term customized software development projects and short term standard projects.

Our main asset consists in having a well prepared Business Analysis Team, capable of delivering state of the art Process Break Down Charts as starting point for any software development in any industry sector.

INDUSTRY	SYSTEM ARCHITECTURE	Special notes
Banking & Finance	Cloud application	home banking system, ATM
Building & Construction	Desktop	5D model, CAD
B2B Logistics	Web application	world #1B2B communication system
Color Management	Desktop	global leader in colour management solutions
Media & Entertainment	Client/Server + Mobile	professional video streaming
Education	Web application	research management system
Energy & Power Supply	Cloud + Mobile	solar power and heating systems, smart home
Travel	Mobile	latest mobile technology
Event management	Cloud + Mobile	tradeshow management

Crew Expertise

Technology Expertise

Over the last 17 years of work in full software development life cycle, Codespring has shown outstanding performance ability to deliver top notch solutions developed on various platforms:

Desktop Applications

Operating Systems	Windows, Linux, MacOS	
Programming Languages	C/C++	C#
Technologies	DirectX, Winsock, CPPUnit, SNMP, Boost, CMake, Ninja, Google Test, Google Mock, Swig, Valgrind	.NET 4.0, ADO.NET, Remoting, WPF, WWF, nUnit, Reporting, LINQ, Sync Framework

Mobile Applications

Platforms	iOS, Android, Windows Phone			
Programming Languages	Objective C	Java	C#	Cross Platform: HTML5, CSS, Java Script
Technologies	iOS SDK, CoCoa	Android SDK, J2ME, BlackBerry SDK	Windows Phone SDK, OpenNetCF, Symbol Mobility SDK, Platform Builder, .Net Micro Framework 4.0	Phonegap

Web Applications/Services

Application Servers	Apache Tomcat, Jboss, IIS 7.0		
Programming Languages	C#	Java	Java Script
Technologies	NET 4.0, ADO.NET, ASP.NET MVC, WPF, WWF, WebService, WCF, SilverLight, SharePoint, Entity Framework	J2EE, JSP, Velocity, Struts, Tiles, Vaadin, Hibernate, EclipseLink (JPA) Spring, Java Web Services (Axis), Ajax, ExtJS, JBPM, Liferay, Jasper Reports	Server side: Node.js

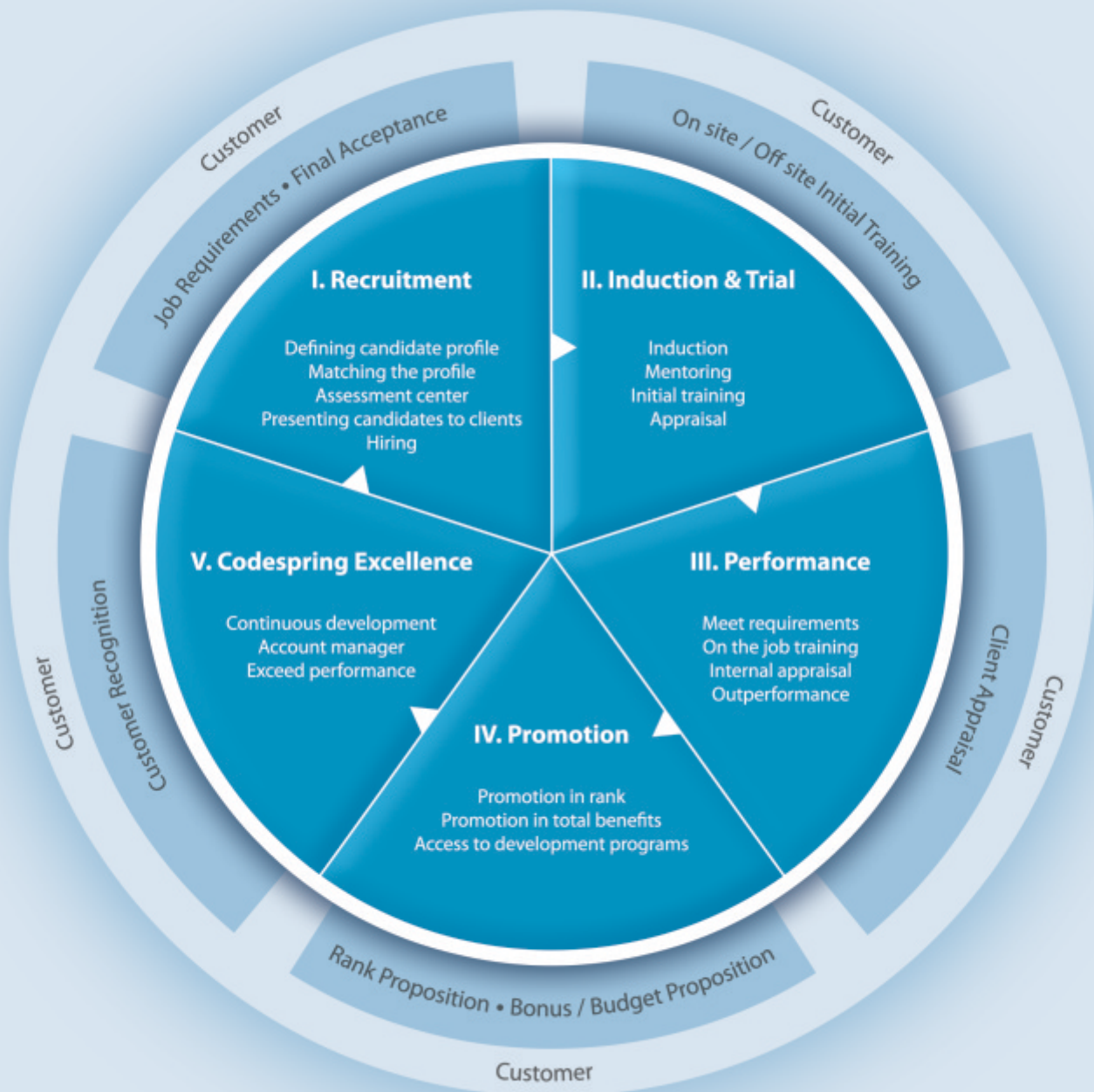Client side: JS, CSS, HTML5, Bootstrap, jQuery, Grunt, Bower, Less, Sass, Compass |

Databases

Relational	Microsoft SQL 2012 Oracle Solid DB Sybase PostgresSQL MySQL Microsoft SQL Compact SQLite
Object Oriented	Versant VOD
noSQL	MongoDB

Development Tools

Project management	Architecture	Development
MS Team Foundation System, Jira, MS Project, eProject	Enterprise Arhitect, Rational Rose, Visual Paradigm	MS Visual Studio 2010, Xcode, IntelliJ IDEA, Eclipse, NetBeans, Doxygen, FishEye, Crucible
Version Control	**Testing**	**Bug Tracking**
SVN, Perforce, Mercurial, GIT, MS TFS	HP Mercury Quality Center, TestComplete, Quicktest	Mantis, Jira, MS TFS, Redmine
Configuration Management	**Profiling**	**Support**
Hudson, Maven, InstallShield, Wix, Jenkins	ANTS Profiler, IBM Rational Purify +, Altova XML Spy, FxCop, JMeter, SONAR	GLPI, Mantis

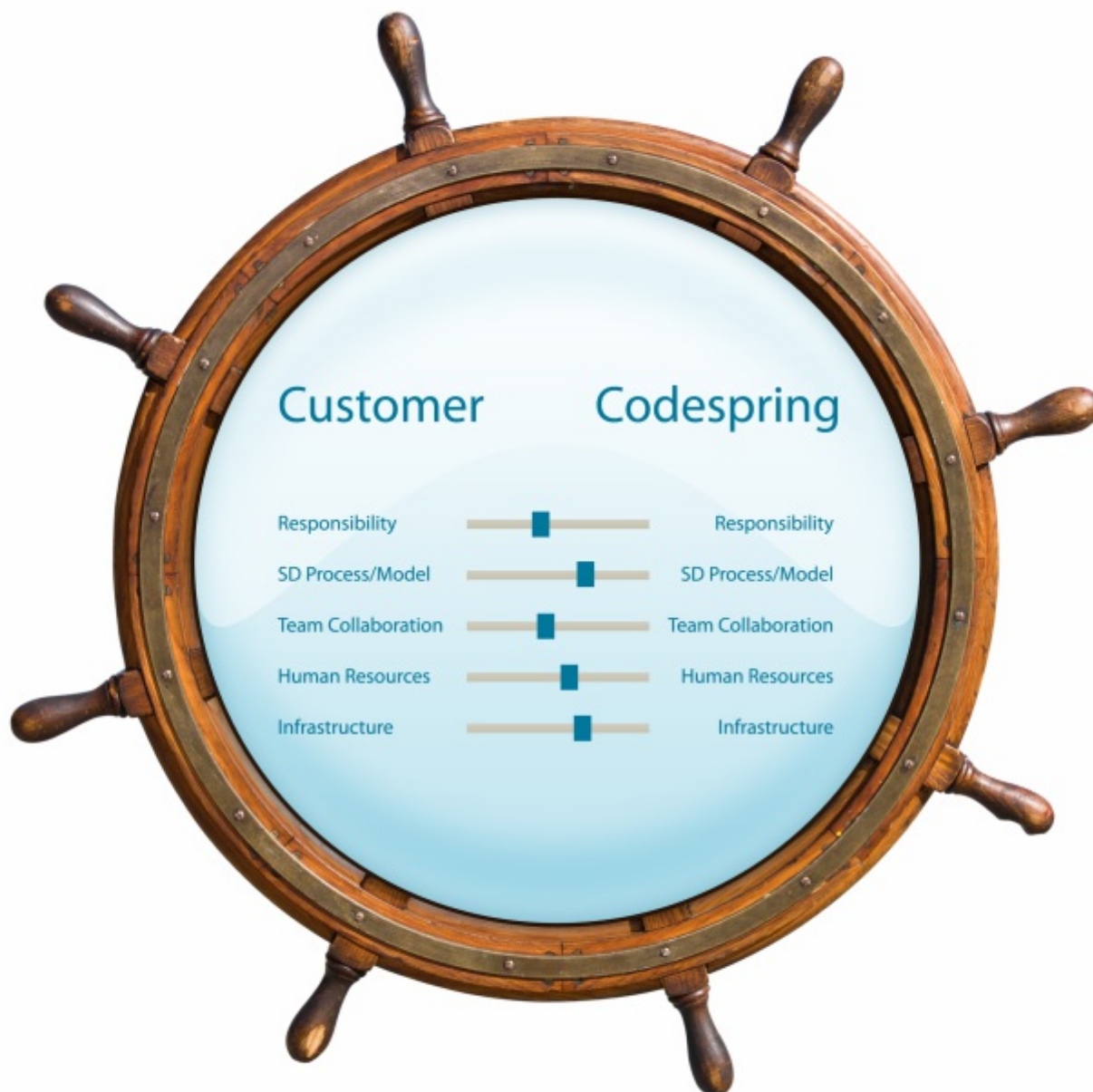# Growing the Crew

Codespring Excellence Plan

As a performance oriented company, we consider our colleagues' career as important as they do. In order to achieve excellence in work, the HR team has developed the Codespring Career Management Plan.

Codespringers are generally dynamic, well skilled, experienced software developers. People who do really well at Codespring have specific strengths in specific areas. Leaders, architects, experts and junior software engineers find here a place to upgrade themselves.

As we have rather long journeys to handle, a skilled and motivated crew is essential for major software development success stories.

Expanding Your Fleet

Outsourcing

Codespring has cumulated 17 years of experience in undertaking outsourcing agreements. The reason why some of our contracts are as old as our company is fine-tuning.

Fine-tuning outsourcing is a key concept that governs our delivery model. There are five major elements that must be fine-tuned when setting the foundation of any project:

- **Responsibility** – what will each party be accountable for?
- **Software Development Process / Model** – which will be the best method?
- **Team Collaboration** – how will provider and customer team work together?
- **Human Resources** – how will provider and customer set up the team? What roles?
- **Infrastructure** – what can each party bring to the project's infrastructure?

When all these elements are well coordinated, the project will reach its maximum effectiveness, disregarding if the engagement is near shore, offshore or on site.

In The Shipyard

Codespring Products

iSpeedCam
Safe at high speed!

Target audience:	Smartphone owners (iOS, Android)
Focus:	Avoiding speed tickets
Main Purpose:	Traffic safety camera warning system
Launched:	2009
Web:	www.ispeedcam.info

iSpeedCam aims to protect drivers from costly speeding tickets and to improve careless and inattentive driving habits.

The application alerts for most traffic cameras (fixed speed cameras, mobile cameras, police spots and red light cameras) and has an editable world-wide camera database.

The iSpeedCam App features online and offline graphical GPS tracking and Google map integration, calculates statistics related to track distance, total time, maximum speed and works both with metric and imperial unit system.

Productis
Built to yield!

Target audience:	Food industry (manufacturing & processing units)
Focus:	Dairy & meat industry
Main Purpose:	Production control and traceability
Launched:	2008
Web:	www.codespring.ro/products/productis

Productis is a solution for production control and traceability.

The application covers the complete value chain of production and handles purchase orders, reception of goods, raw material inventory, processing, packaging, storage, inventory, deliveries and invoices.

The software is customizable to meet specific requirements and features real time entries via Smart Phones.

Productis puts a clear and secure document and data management system to your disposition and allows work with remote teams.

Get Your Sailing Licence

Best Practices and How Tos

1. **Define your project:**
- Outline your idea and try to make a list of priorities;
- Analyse the way you want to undertake remote work: nearshore or offshore;
- If the project is unclear and will be subject to consistent changes, try the agile method and ask for prototyping;
- Use the same document when asking for software development outsourcing offers.

2. **Select the right outsourcing partner:**
- Make a list with all essential selection criteria (industry / technology / consultancy capability / communication language / required HR / interview availability / team continuity, etc.);
- Request for quotes, ask for references, plan a visit and make a trial project;
- Set a post-trial project analysis and highlight lessons learnt;
- Take a decision.

3. **Fine tune the cooperation:**
- Set clear responsibilities;
- Choose the software development method that suits you best;
- Draw the way for team collaboration;
- Specify how the teams will be formed;
- Set each party's contribution to the project's infrastructure.

4. **Control the process:**
- Set and follow the development plan;
- Set stand-up meetings, weekly status reports and set a permanent contact person;
- Point out potential issues and communicate them in order to get them solved.

Sea Journeys

Success Stories

P92 It Solutions, Hungary

■ **Customer Type:** Application development and knowledge management service provider, with special impetus on e-commerce and web portal development.

■ **Collaboration:** outsourcing partnership in small to medium size projects for over 8 years. Main projects: gas distribution management software for consumers; customer lifecycle management platform for handling web content management, e-mail marketing, digital marketing, customer acquisition, retention and loyalty programs for BMW.

Graphisoft, Hungary

■ **Customer Type:** innovator and industry leader in architecture and building & construction industry. Provider of the industry's first BIM Software for architects, provider of the world's 1st real-time BIM collaboration environment and the world's 1st fully integrated building energy modeling application.

■ **Collaboration:** architecture design, implementation, unit test, maintenance of various versions of ArchiCAD, Graphisoft's flagship product. Our team has been working on the ArchiCAD engine, on developer support tools and on various add-ons (MEP Modeller for modeling of ductworks and plumbing).

Campana & Schott, Germany

■ **Customer Type:** project and process management service provider, with focus on management and technology consulting. The company has long-term, successful business relationships with well-known customers from all branches.

■ **Collaboration:** full life-cycle software development of specific employee time accounting information software module. The short-term project aimed to host holiday and sickness management for corporate customers.

Wind River, USA

■ **Customer Type:** world leader in embedded and mobile software. Wind River has been pioneering computing inside embedded devices since 1981 and its technology is found in more than 1 billion products.

■ **Collaboration:** full life-cycle software development of an advanced FM Radio application for a car radio system on Android. It's capabilities include background running, RDS data processing, TA/PTY/EMERGENCY interruptions and others. It uses an Android NDK library to interact with the Radio Tuner on the hardware platform.

Sea Journeys

Success Stories

Datacolor, USA

■ **Customer Type:** global leader in colour management solutions and colour communication technology. The company has provided innovative solutions for over 40 years for the world's leading brands enabling them to calibrate cameras, monitors, printers, HD TVs, iPads and iPhones.

■ **Collaboration:** full life-cycle software development and full life-cycle testing of Datacolor's flagship software products for over 6 years. The Codespring Team is responsible for complete computerized systems for color measuring, matching, quality control, and communication to industries who must manage color accurately from design throughout production to marketing. Design, documentation, implementation, testing, bug fixing, quality assessment activities were delivered.

Teracue, Germany

■ **Customer Type:** pioneer of video broadcasting IP networks in the 90s, today well-known manufacturer of hardware and software products for IPTV solutions and video networking, distributor of video measuring equipment, signal monitoring and analysis devices and fibre optics transmission technology.

■ **Collaboration:** full life-cycle software development in IPTV solutions for over 10 years. Codespring has been developing an iCue Streaming System for intranet IPTV, performing real time encoding and digital distribution, management and recording of TV channels and camera signals(encoding, live streaming, on-demand streaming).

Seeburger, Germany

■ **Customer Type:** market leader in business-to business integration, long standing SAP partner, having 19 subsidiaries in Europe, Asia and North America, winner of Information Technology Industry's 2012 World's Best Awards for SEE FX.

■ **Collaboration:** full life-cycle software development in order management and logistics for over 6 years. The Codespring Team is working on an automated ordering and delivery system and an online order management system for the automobile supply sector.

Vico Software, USA

■ **Customer Type:** software Service Provider for the building and construction industry. Vico's 5D Virtual ConstructionTM solutions pioneered the category of BIM for Construction, and they remain the industry's most integrated approach to coordination, quantity takeoff, cost estimation, project scheduling, and production control.

■ **Collaboration:** full life-cycle software development of Vico Software's flagship virtual construction products for over 9 years. Add-ons, building design modules, product functionalities and support tools of the Vico Office Package have been developed by our team.

Set Sail!

Heading for the Future

As a final note, the Codespring team of experts is willing to share with you, our potential partner, some of its future plans and commitments.

Firstly, **Codespring** is devoted to its vision of building great strategic partnerships with specialized software development companies and teams, contributing to the evolution of IT&C industry.

Secondly, **Codespring** as a consolidated company with a performing team is dedicated to become one of the most challenging software development teams in South-Eastern and Central Europe, using state of the art technologies.

Last, but not least, **Codespring** aims to engage its creativity and intellectual potential in developing software products and systems of the finest quality, always keeping an eye on the social responsibility and ethics of any endeavour.

Looking forward to meeting you and learning more about the huge potential within our possible collaboration,

Codespring Team.

Testimonials

"

We are very pleased with the performance of your people. They produce very good quality code, are very responsive, and committed. We appreciate this very much.

Brian Levey
Vice President, Datacolor

"

We have always been very satisfied with the services Codespring provided in the last 9 years since we started working together. Their developers are knowledgeable pros you can rely on.

Attila Bárdos
Director R&D, Vico Software

"

We are glad to have discovered this team. Agile and fast learners, they implement all technical requirements. They promised to deliver high quality and efficiency, and they Do It day by day!

Boros László
Department Manager, P92 It Solutions

"

Over our 12 years of collaboration for developing professional video applications, mutual trust and respect were the fundaments of our partnership. Technically skilled, receptive and prompt, they continuously uplift their knowledge and expertise.

Lorenz Zoltán
Product Manager, inPhase

"

The Codespring team is a self-motivated partner, with good time and task management skills, who takes initiatives in their projects, and with whom we can communicate efficiently without language or geographical boundaries. Their professionalism makes them our reliable partner.

Hajnal Schwerdtfeger
Product Manager, Seeburger

CODESPRING

OUR CODE YOUR SUCCESS

- SOFTWARE DEVELOPMENT
- SOFTWARE OUTSOURCING
- SOFTWARE TESTING
- IT SECURITY
- CUSTOMER ASSISTANCE
- WEB & MOBILE DEVELOPMENT

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